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DEFINITION Human signal transducer and activator of transcription Stat5B mRNA, complete cds.
ACCESSION U47686
VERSION U47686.1 GI:1330323
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE 1 (bases 1 to 2782)
AUTHORS Lin, J.-X., Mietz, J., Modi, W. S., John, S. and Leonard, W. J.
TITLE Cloning of human Stat5B. Reconstitution of interleukin-2-induced Stat5A and Stat5B DNA binding activity in COS-7 cells
J. Biol. Chem. 271 (18), 10738-10744 (1996)
JOURNAL 96210005
MEDLINE 8631883
PUBMED
REFERENCE 2 (bases 1 to 2782)
AUTHORS Lin, J.-X., Mietz, J., Modi, W. S., John, S. and Leonard, W. J.
TITLE Direct Submission
Submitted (31-JAN-1996) Jian-Xin Lin, Lab of Molecular Immunology, NHLBI, NIH, 9000 Rockville Pike, Bldg. 10, Rm. 7N244, Bethesda, MD 20892-1674, USA
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ORIGIN
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DEFINITION Sequence 3 from Patent WO2004042040.
ACCESSION Q0815791
VERSION Q0815791.1 GI:48144323
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens

REFERENCE 1
AUTHORS Nakachi, H. and Iwama, A.
TITLE Expansion agents for stem cells
JOURNAL Patent: WO 2004042040-A 3 21-MAY-2004;
ReproCELL Inc. (JP)
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ORIGIN

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VERSION U48730.2 GI:6981725
KEYWORDS
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ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 2716)
AUTHORS Silva,C.M., Lu,H. and Day,R.N.
TITLE Characterization and cloning of STAT5 from IM-9 cells and its activation by growth hormone
JOURNAL Mol. Endocrinol. 10 (5), 508-518 (1996)
MEDLINE 96311205
PUBMED 8732682
REFERENCE 2 (bases 1 to 2716)
AUTHORS Silva,C.M. and Lu,H.
TITLE Direct Submission
JOURNAL Submitted (07-FEB-1996) Internal Medicine, University of Virginia, Box 511, Charlottesville, VA 22908, USA
REFERENCE 3 (bases 1 to 2716)
AUTHORS Silva,C.M. and Lu,H.
TITLE Direct Submission
JOURNAL Submitted (16-FEB-2000) Internal Medicine, University of Virginia, Box 511, Charlottesville, VA 22908, USA
REMARK Sequence update by submitter
COMMENT On Feb 16, 2000 this sequence version replaced gi:1216480.
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ORIGIN

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VERSION BC065227.1 GI:40807019
KEYWORDS MGC
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 5167)

Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Hatschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.J., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Ustin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Adams, R.D., Mullany, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.W.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalón, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahy, J., Helton, E., Kettelman, M., Madan, A., Rodriguez, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smal, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences

Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
12477932
2 (bases 1 to 5167)
Director MGC Project.

Direct Submission
Submitted (12-JAN-2004) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
USA
NIH-MGC Project URL: <http://mgc.nci.nih.gov>
Contact: MGC help desk
Email: gcaps-1@mail.nih.gov

Tissue Procurement: Life Staudt
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
DNA Sequencing by: National Institutes of Health Intramural
Sequencing Center (NISC),

Gaithersburg, Maryland;
 web site: <http://www.nisc.nih.gov/>
 Contact: nisc.mc@nih.gov
 Akhter, N., Ayele, K., Beckstrom-Sternberg, S.M., Benjamin, B.,
 Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S.,
 Dietrich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P.,
 Hansen, N., Ho, S.-L., Karlins, E., Kwong, P., Laric, P., Legaspi, R.,
 Maduro, O.L., Masiello, C., Maskeri, B., Mastrian, S.D., McCloskey, J.C.,
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 Young, A., Zhang, L.-H. and Green, E.D.

Clone distribution: MGC clone distribution information can be found
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 Location/Qualifiers

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Qy	2281	GACAAATGGACGTAGCGCGCGCTGTGGAGAGCTCTCTGGCGCGCCCAATGGACAGTCAG	2340
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AF135123			
LOCUS			
DEFINITION Sus scrofa signal transducer and activator of transcription 5b			
(Stat5b) mRNA, complete cds.			
ACCESSION AF135123			

VERSION	AF135123.1	GI:5669104
KEYWORDS	Sus scrofa (pig)	
SOURCE	Sus scrofa	
ORGANISM	Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.	
REFERENCE	1 (bases 1 to 2414)	
AUTHORS	Palin,M.F., Beaudry,D., Roberge,C. and Farmer,C.	
TITLE	Submitted (15-MAR-1999) Agriculture and Agri-Food Canada, Dairy and	
JOURNAL	Swine Research and Development Centre, P.O. Box 90, 2000 Route 108	
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LOCUS				Qy	181	CTGAGGGCTGTGTCAGGAGCTGCAGAAAGAGCAGAGCACAGGTGGGGGAGATGGG	240
DEFINITION				Db	182	CTGAGGGCTGTGTCAGGAGTTGCAGAAAGAGCAGAGCACCAAGTGGGGGAGAGCGG	241
ACCESSION				Qy	241	TTTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAACACGTATGACCGC	300
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Db	1371	CTGAAACGAATCAAGAGGTCTGACCCGCTGGTGCGAGTCCGTCACGGAAGAGAAGTTC	1430
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Db	1791	GAGAAATTAACAGGACGGAATTAACATTTCTGCGAGTGGTTTTCAGCGGTGATGGAAGTG	1850
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Db	1851	TTAAAGAAACATCTCAGGCTCATTTGGAACGATGGGSCCATTTGGGTTTCTGTGAACAAG	1910
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Db	1911	CAGCAGGCCCATACCTTACTGATTAACAAGCCAGATGGGACCTTCTCTCTGAGATTTCAGT	1970
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Matches 2132; Conservative 0; Mismatches 229; Indels 3; Gaps 1;			
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Db	154	ATGCTATGTGGATACAAAGCTCAGCAGCTCAGGCGGATGCCCTTCCACGATGCAGGCC	213
Qy	61	TTATATGCCAGCATTTTCCCATTTAGGTGGGCAATTTATCCCATGGATTTGAAGC	120
Db	214	TTGTACGGCCAGCATTTTCCCATCGAGGTGGCAATTTATTTATCACAGTGGATCGAAGC	273
Qy	121	CAAGCATGGGACTCAGTAGATCTTTGATAATCCACAGGAGAAACATTAAAGGGCACCCAGCTC	180
Db	274	CAAGCTTGGGACTCAATAGATCTTGATAATCCACAGGAGAAACATTAAAGGGCACCCAGCTC	333
Qy	181	CTGAGGGCCCTGGTGCAAGGAGCTCAGAAAGGACGAGCAACGAGTGGGGGAAGATGGG	240
Db	334	CTGAGGGCCCTGGTGCAAGGAGCTCAGAAAGGAGCGGAGCACCAAGTGGGGGAAGATGGG	393
Qy	241	TTTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAACAGTATGACCGC	300
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 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 2940)
 Davodi-Semiomi, A., Laloraya, M., Kumar, G.P., Purohit, S., Jha, R.K.
 and She, J.-X.
 A Mutant Stat5b with Weaker DNA Binding Affinity Defines a Key
 Defective Pathway in Nonobese Diabetic Mice
 J. Biol. Chem. 279 (12), 11561-11561 (2004)
 14701862
 REFERENCE 2 (bases 1 to 2940)
 Davodi-Semiomi, A., Laloraya, M., Kumar, P.G. and She, J.-X.
 Direct Submission
 TITLE Submitted (13-JUN-2001) Pathology, University of Florida,
 Gainesville, FL 32610, USA
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ORIGIN

Query Match 83.8%; Score 1980; DB 10; Length 2940;
 Best Local Similarity 90.1%; Pred. No. 0;
 Matches 2131; Conservative 0; Mismatches 230; Indels 3; Gaps 1;
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VERSION AY044901.1 GI:21654902
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ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 2940)
Davoodi-Semiromi, A., Laloraya, M., Kumar, P. and She, J.-X.
Mutation detection in murine STAT gene family: identification and
characterization of a novel point mutation in DNA binding domain of
Stat5b in NOD
Unpublished
REFERENCE 2 (bases 1 to 2940)
Davoodi-Semiromi, A., Laloraya, M., Kumar, P. and She, J.-X.
Direct Submission
Submitted (10-JUL-2001) Pathology, University of Florida,
Gainesville, FL 32610, USA
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EALNMFKAQVQSNRGLTKENLVPLAQKLFNLSNHELYNSMSQNFENLPCR
NYTFWQFQDSQMEVLKHLKHPHNDGAILGFVNKQQAHLINKPQDGTFLLRSDSEI
GTTITAKFDSQMEVFNLPFTTRDIFSIRSLADRLGLDNLNLIYVFPDRPDDEVYSKY
YTPVPCPEATAKAADGYVRKQIVPPEFANASTDAGSGATYMDQAPSPVVCQAHYN
MYPNPDSVLDITDGFDEDTMDVARRVBELLGRPMDSQWIPHAQS"

Qy	2101	AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGATCTGCAGATGCCGGGGC	2160
Db	2584		2643
Qy	2161	GGCAGCGCCAGTACATGGACAGGCCCCCTCCCCAGCTGTGTCTCCCCAGGCTCACTAT	2220
Db	2644	G---GGCCACTACATGGATCAGGCTCCTTCCCCAGTCTGTGTCTCCCTCAGGCTCACTAC	2700
Qy	2221	AACATGTACCCACAGAACCCCTGACTCAGTCTTGACACCGATGGGACTTCGATCTGGAG	2280
Db	2701	AACATGTACCCACCAACCCGGACTCCGTCCTTGATACCGATGGGACTTCGATCTGGAA	2760
Qy	2281	GACACAATGGACGTAGCGGCGCTGTGGAGAGCTCCTGGGCGGCGCAATGGACAGTCAG	2340
Db	2761		2820
Qy	2341	TGGATCCCGCACGCACAATCGTGA	2364
Db	2821	TGGATCCCTCACGCACAGTCATGA	2844

Search completed: May 17, 2005, 06:14:57
Job time : 16237 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: May 16, 2005, 23:15:04 ; Search time 11360 Seconds
(without alignments)
7921.121 Million cell updates/sec

Title: US-10-052-482-162
Perfect score: 2364
Sequence: 1 atggctgtgtggatacaagc.....tccgcacgcacacatcgtga 2364

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 34239544 seqs, 19032134700 residues

Total number of hits satisfying chosen parameters: 68479088

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : EST:*
1: gb_est1:*
2: gb_est2:*
3: gb_hic:*
4: gb_est3:*
5: gb_est4:*
6: gb_est5:*
7: gb_est6:*
8: gb_gsal:*
9: gb_gse2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1970.6	83.4	4986	3	AK045531 Mus muscu
2	956.8	40.5	1151	1	AL513644
3	923.4	39.1	1084	4	BM449533 AGENCOURT
4	862.8	36.5	1079	5	BM427445 BX427445
5	841	35.6	929	7	CO648803 ILLUMIGEN
6	820.6	34.7	1071	4	BM450408 AGENCOURT
7	809.2	34.2	877	5	BQ932442 AGENCOURT
8	807.6	34.2	1025	5	BX401753 BX401753
9	805.8	34.1	909	5	BUS08310 AGENCOURT
10	804	34.0	895	5	BQ706867 AGENCOURT
11	780	33.0	879	5	BQ706430 AGENCOURT
12	778.4	32.9	978	5	BX431739 BX431739
13	767	32.4	917	5	BQ941072 AGENCOURT
14	753	31.9	991	1	AL576279
15	743.2	31.4	771	7	CF995633 AGENCOURT
16	734.6	31.1	742	5	BX499735 DKFZ779P
17	734.2	31.1	827	7	CO740375 SLL07a26
18	724.6	30.7	975	1	AL553220 AL553220
19	717.4	30.3	755	5	BX114538 BX114538
20	700.6	29.6	983	5	BX427446 BX427446
21	700	29.6	886	5	BQ670478 AGENCOURT
22	664.4	28.1	756	4	BG490357
23	664	28.1	985	5	BX422302 BX422302
24	658.2	27.8	730	5	BP147881 BP147881

25	647.4	27.4	758	7	CF535503
26	647.4	27.4	907	1	AL521374
27	646.2	27.3	853	5	BUI87856
28	642.6	27.2	1019	5	BX385196
29	638.6	27.0	715	4	BI520110
30	628.8	26.6	937	1	AL540450
31	628.4	26.6	681	4	BG394677
32	623.8	26.4	699	5	BQ939396
33	623.4	26.4	922	5	BQ939396
34	621.6	26.3	756	7	CF531926
35	621.6	26.3	1155	6	CD506834
36	617	26.1	793	2	BE545849
37	616.8	26.1	712	7	CN460794
38	614.6	26.0	706	7	CF742767
39	606.4	25.7	617	7	CF137996
40	605.8	25.6	769	4	BI415585
41	604.4	25.6	720	4	BI650503
42	604.2	25.6	828	6	CD616432
43	602	25.5	789	7	CK482172
44	589.4	24.9	811	2	BE253625
45	588.4	24.9	604	7	CN357151

ALIGNMENTS

RESULT 1	AK045531	4986 bp	mRNA	linear	HTC 03-APR-2004				
LOCUS	Mus musculus adult male corpora quadrigemina cDNA, RIKEN								
DEFINITION	full-length enriched library, clone:B230209B11 product:signal transducer and activator of transcription 5B, full insert sequence.								
ACCESSION	AK045531								
VERSION	AK045531.1	GI:26090947							
KEYWORDS	HTC; CAP trapper.								
SOURCE	Mus musculus								
ORGANISM	Mus musculus								
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.								
AUTHORS	Carninci, P. and Hayashizaki, Y.								
TITLE	High-efficiency full-length cDNA cloning								
JOURNAL	Meth. Enzymol. 303, 19-44 (1999)								
MEDLINE	99279253								
PUBMED	10349636								
REFERENCE									
AUTHORS	Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.								
TITLE	Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes								
JOURNAL	Genome Res. 10 (10), 1617-1630 (2000)								
MEDLINE	20499374								
PUBMED	11042159								
REFERENCE									
AUTHORS	Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsuai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, K., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwaka, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y.								
TITLE	RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer								
JOURNAL	Genome Res. 10 (11), 1757-1771 (2000)								
MEDLINE	20530913								
PUBMED	11076861								
REFERENCE									
AUTHORS	The RIKEN Genome Exploration Research Group Phase II Team and the FANTOM Consortium.								
TITLE	Functional annotation of a full-length mouse cDNA collection								
JOURNAL	Nature 409, 685-690 (2001)								
MEDLINE	20530913								
PUBMED	11076861								
REFERENCE									
AUTHORS	The FANTOM Consortium and the RIKEN Genome Exploration Research								

Db 1660 CACGATCTCTGTTGACTCACAGTTTCAGCGTCGGTGGAAACGAGCTGGTCTTTTCAAGTCAA 1719
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Qy 2340 GTGGATCCCGCAGCAGCAATCTGTA 2364
Db 2677 GTGGATCCCTCAGCAGCATGTCATGA 2701

LOCUS AL513644 1151 bp mRNA linear EST 23-MAR-2004
DEFINITION AL513644 Homo sapiens NEUROBLASTOMA Homo sapiens cDNA clone
XCL0B001ZG12 5-PRIME, mRNA sequence.
ACCESSION AL513644
VERSION AL513644.3 GI:45650618
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Mammalia; Eukarya; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eukarya; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 1151)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
On Feb 13, 2001 this sequence version replaced gi:31037647.
COMMENT Contact: Genoscope
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoRV sites of the pCMVSPORT 6 vector. Library
was not normalized. Library was constructed by Life Technologies, a
division of Invitrogen.
This sequence belongs to sequence cluster 8244.r
For more information about this cluster, see
http://www.genoscope.cns.fr/cdna?e=XCL0B001ZG12RP1&c=8244.r.
FEATURES
Location/Qualifiers
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/note="vector: pCMVSPORT_6; 1st strand cDNA was primed
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double-strand cDNA was digested with Not I and cloned into
the Not I and EcoRV sites of the pCMVSPORT 6 vector.
Library was not normalized."
ORIGIN
Query Match 40.5%; Score 956.8; DB 1; Length 1151;
Best Local Similarity 99.5%; Pred. No. 2e-227;
Matches 969; Conservative 1; Mismatches 3; Indels 1; Gaps 1;
Qy 1391 TGCAGTGGTGGTATCGTTTCATGCGCAGGACCAATGCGAGCCCACTGTTCTCT 1450
Db 1 TGCAGTGGTGGTATCGTTTCATGCGCAGGACCAATGCGAGCCCACTGTTCTCT 60
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Qy 1511 GGCCACAGCTGTGAGCGCTCAACATGAATTCAGGCGCGAAGTCAGAGCAACCGGG 1570
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Qy 1631 ACCTGGAGGACTACAGTGGCCCTGTGTGTCTTGTCTCCAGTTCACAGGAGGAATTTAC 1690
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Qy 1691 CAGGACGGAATTACACTTTCTGGCAATGTTTGA CGGTGTGATGGAAGTGTAAATAAAC 1750
Db 301 CAGGACGGAATTACACTTTCTGGCAATGTTTGA CGGTGTGATGGAAGTGTAAATAAAC 360
Qy 1751 ATCTCAAGCCTCATTTGGAATGATGGGCCATTTTGGGGTTTGTAAACAGCAGCAGGCC 1810
Db 361 ATCTCAAGCCTCATTTGGAATGATGGGCCATTTTGGGGTTTGTAAACAGCAGCAGGCC 420

Tel: 2063780400
 Fax: 2063780408
 Email: cmagness@illumigen.com
 Sequenced on 2004.06.03. 715 Q20 bases. Library Preparation: Prof. Michael Katze Lab at University of Washington DNA Sequencing: Illumigen Biosciences Inc. For further information, see <http://www.macaque.org>

PCR Primers

FORWARD: CCCTCACTAAAGGGAACAAA

BACKWARD: CACTATAGGGCGAATTGGGTA

Insert Length: 929 Std Error: 0.00

Plate: CL000311 row: D column: 02

Seq primer: CCCTCACTAAAGGGAACAAA

POLYA-No.

FEATURES

Location/Qualifiers

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 /dev_stage="adult"
 /lab_host="Electromax DH10B"
 /clone_lib="katze MMPB2"
 /note="Vector: pDONR 222; Site 1: BsrG I; Site 2: BsrG I;
 Created from CloneMiner cDNA Library Construction kit
 (catalog #18249-029)"

ORIGIN

Query Match 35.6%; Score 841; DB 7; Length 929;
 Best Local Similarity 96.3%; Pred. No. 1.6e-198;
 Matches 893; Conservative 0; Mismatches 30; Indels 4; Gaps 3;

QY 1268 GAATTAGAGGTGACCGTGTGGGGCAGAGTCGGTGACAGAGAGAAAATTTACAATCC 1327
 DB 3 GGATTAGAGATCAGACCGTGTGGGGCAGAGTCAGTGACAGAGAGAAAATTTACAATCC 62
 QY 1328 TGTTTGAATCCAGTTCAGTGTGGTGAATGAGCTGGTTTTCAGAGTCAAGACCCCTGT 1387
 DB 63 TGTTTGAATCCAGTTCAGTGTGGTGAATGAGCTGGTTTTCAGAGTCAAGACCCCTGT 122
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 DB 123 CCCTGCCAGTGGTGTGATGCTTATGACAGCCAGGACAAATGCGAGCCACCGTTC 182
 QY 1448 TCTGGGCAATGCTTTTGCAGAGCTGCGAGGTCCTATTTGCCGTGCTGACAAAGTGC 1507
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 QY 1508 TGTGGCCACAGCTGTGTGAGCGCTCAACATGAAATTAAGCGCGAAAGTCGAGAGCAACC 1567
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 QY 1628 GCCACCTGGAGACTACAGTGGCTGTGTGTCTGTCTCCAGTTCACAGGAGAGATT 1687
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 QY 1688 TACCAGGACGGAATTACATTTCTGGCAATGTTTGACGGTGTGATGGAAGTGTAAAAA 1747
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 QY 1808 CCCATGACCTACTGATTAAACAAGCAGATGGGACCTTCTCTCCTGAGATTCACTGACTCAG 1867

DB 543 CCCATGACCTACTCAITTAACAGCCAGATGGGACCTTCTCTGCTGAGATTCACTGACTCAG 602
 QY 1868 AAATTGGCGGCATCACCATTTGCTTTGGAAGTTTGATTTCTCAGGAAAGAAATGTTTGGAAATC 1927
 DB 603 AAATTGGCGGCATCACCATTTGCTTTGGAAGTTTGATTTCTCAGGAAAGAAATGTTTGGAAATC 662
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 DB 663 TGATGCCCTTTTACCACAGAGACTTCTCCATTCGGTCCCTAGCCGACCGCTTGGGAGACT 722
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 DB 723 TGAATTACCTTTATCTACGTGTTTCTGATCGGCCAAAGAGATGAAGTATATCTCCAAATACT 782
 QY 2048 ACACACCAAGTTCCCTGCGAGTCTGCTACTGCTAAAG-CTGTTGATGATGATCGTGAAGCCA 2106
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 QY 2107 CAGATCAAGCAAGTGG-TCCCTGAGTTTGTGAACGCACTGACAGATCCCGG--GGCGGC 2163
 DB 843 CAAATCAAGCAAGTGGTTCCCTGAAATTTGTGAACCCCTTCTGCAAAATGCGCGGAGCGGGC 902
 QY 2164 AGCGCCACGTACATGGACCAAGGCCCC 2190
 DB 903 AGCGCCCTTACCTGGACCAAGGCCCC 929

RESULT 6
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 LOCUS BM450408
 DEFINITION AGENCOURT_6394143 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:5494762
 5', mRNA sequence.
 ACCESSION BM450408
 VERSION BM450408.1 GI:18499448
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 REFERENCE 1 (bases 1 to 1071)
 AUTHORS NIH-MGC <http://mgi.nci.nih.gov/>.
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-x@mail.nih.gov
 Tissue Procurement: ATCC
 cDNA Library Preparation: Life Technologies, Inc.
 DNA Sequencing by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Agencourt Bioscience Corporation
 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
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 Location/Qualifiers
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 /clone_lib="NIH_MGC_67"
 /note="Organ: eye; Vector: pCMV-SPORT6; Site: 1: NotI; Site 2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.75 kb. Library constructed by Life Technologies."

FEATURES
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 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:5494762"
 /tissue_type="retinoblastoma"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="NIH_MGC_67"
 /note="Organ: eye; Vector: pCMV-SPORT6; Site: 1: NotI; Site 2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.75 kb. Library constructed by Life Technologies."

ORIGIN
 Query Match 34.7%; Score 820.6; DB 4; Length 1071;
 Best Local Similarity 96.2%; Pred. No. 2e-193;
 Matches 862; Conservative 0; Mismatches 30; Indels 4; Gaps 2;


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QY 601 ACGGACATTATCTCAGCCCTGGTGACGACGAGCTTCATTCATTGAGACGAGCTCCTCAG 660
Db |||||||
QY 1021 GTCCTGAAGACCCAGACCAAGCTTTGCAGCCACTGTGCGCCCTGCTGGTGGGCGGAAGCTG 1080
Db |||||||
QY 661 GTCCTGAAGACCCAGACCAAGCTTTGCAGCCACTGTGCGCCCTGCTGGTGGGCGGAAGCTG 720
Db |||||||
QY 1081 AACGTGCATGAACCCGCCAGAGTGAAGGCCACCATCATCATGAGACGACGAGCCCAAG 1140
Db |||||||
QY 721 AACGTGCATGAACCCGCCAGAGTGAAGGCCACCATCATCATGAGACGAGCCCAAG 780
Db |||||||
QY 1141 TCTCTGCTCAAGAACGAGAACCCCGCAATCATTCAGT-GGCGAGATCTTTGAA 1193
Db |||||||
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Db |||||||

RESULT 8
LOCUS BX401753 1025 bp mRNA linear EST 28-APR-2004
DEFINITION BX401753 Homo sapiens B CELLS (RAMOS CELL LINE) COT 25-NORMALIZED
Homo sapiens cDNA clone CS0DL008YC13 5-PRIME, mRNA sequence.
ACCESSION BX401753
VERSION BX401753.2 GI:46835520
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1025)
Li W.B., Gruber C., Jessee J. and Polayes D.
Full-length cDNA libraries and normalization.
Unpublished (2001)
On May 13, 2003 this sequence version replaced gi:30610754.
Contact: Genoscope
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: segre@genoscope.cns.fr, Web : www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo (dr) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library
was normalized. Library was constructed by Life Technologies, a
division of Invitrogen. This sequence belongs to sequence cluster
8244.r
For more information about this cluster, see
http://www.genoscope.cns.fr/cdna?s=CS0DL008AB07QPI&c=8244.r.
FEATURES
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25-NORMALIZED"
/note="1st strand cDNA was primed with a NotI-oligo (dr)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized."
ORIGIN
Query Match 34.2%; Score 807.6; DB 5; Length 1025;
Best Local Similarity 97.2%; Pred. No. 3.5e-190;
Matches 846; Conservative 6; Mismatches 15; Indels 3; Gaps 3;
QY 1 ATGCTGTGTGATCAAGCTCAGCAGCTCCAGGAGAGCCCTCATCATCAGATCAAGCG 60
Db |||||||
QY 148 ATGGCTGTGTGATCAAGCTCAGCAGCTCCAGGAGAGCCCTCATCATCAGATCAAGCG 207
Db |||||||
QY 61 TTATATGCCAGCATTTTCCCATTTGAGTGGCGGCAATTTATTTATCCCATGATTGAAAGC 120
Db |||||||

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Db |||||||
QY 208 TTATATGCCAGCATTTTCCCATTTGAGTGGCGCAATTTATTTATCCCATGATTGAAAGC 267
Db |||||||
QY 121 CAAGCATGGGACTCAGTAGATCTTTGATTAATCCACAGGAGAACATTAAGGCCACCCAGCTC 180
Db |||||||
QY 268 CAAGCATGGGACTCAGTAGATCTTTGATTAATCCACAGGAGAACATTAAGGCCACCCAGCTC 327
Db |||||||
QY 181 CTGAGAGGCGCTGTGTGAGGAGCTGCAGAGAAGGACAGACACAGGTGGGGAAGATGGG 240
Db |||||||
QY 328 CTGAGAGGCGCTGTGTGAGGAGCTGCAGAGAAGGACAGACACAGGTGGGGAAGATGGG 387
Db |||||||
QY 241 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAAACAGATGACCGC 300
Db |||||||
QY 388 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAAACAGATGACCGC 447
Db |||||||
QY 301 TGCCCCATGAGAGCTGGTCCGCTGCATCGGCCATATATTGTACATGACAGAGGTTGGTC 360
Db |||||||
QY 448 TGCCCCATGAGAGCTGGTCCGCTGCATCGGCCATATATTGTACATGACAGAGGTTGGTC 507
Db |||||||
QY 361 CGAGAAGCCAAATAGTGTAGCTCTCCAGCTGGAGAGCCTTGCTGATGTCATGTCCTCCAGAAA 420
Db |||||||
QY 508 CGAGAAGCCAAATAGTGTAGCTCTCCAGCTGGAGAGCCTTGCTGATGTCATGTCCTCCAGAAA 567
Db |||||||
QY 421 CACCTCCAGATCAACACAGAGCTTTTGGAGAGCTGCGACTTGGTCAACGAGGACACAGAGAA 480
Db |||||||
QY 568 CACCTCCAGATCAACACAGAGCTTTTGGAGAGCTGCGACTTGGTCAACGAGGACACAGAGAA 627
Db |||||||
QY 481 GAGTTAAAAAGCTGACGACGACTCAGAGTAGTACTTTCATCATCTCCAGTACCAGGAGAGCTG 540
Db |||||||
QY 628 GAGTTAAAAAGCTGACGACGACTCAGAGTAGTACTTTCATCATCTCCAGTACCAGGAGAGCTG 687
Db |||||||
QY 541 AGGATCAAGCTCAGTTTGGCCCGCTGCCAGCTGAGCCCCAGGAGCGCTCTCAGCGCG 600
Db |||||||
QY 688 AGGATCAAGCTCAGTTTGGCCCGCTGCCAGCTGAGCCCCAGGAGCGCTCTCAGCGCG 747
Db |||||||
QY 601 GAGAGCGCCCTCCACAGAGAGCAGTGTCTCTGAGAGCCTGGTTGACGCGGTGAGGCAAG 660
Db |||||||
QY 748 GAGAGCGCCCTCCACAGAGAGCAGTGTCTCTGAGAGCCTGGTTGACGCGGTGAGGCAAG 807
Db |||||||
QY 661 ACATGACGACGATACCCGCTGGAGCTCCCGAGAGAGCACCAGAGAGCCCTGCAGCTGCTG 720
Db |||||||
QY 808 ACATGACGACGATACCCGCTGGAGCTGGCCGAGAGAGCACCAGAGAGCCCTGCAGCTGCTG 867
Db |||||||
QY 721 CGGAAGCAGACAGACCATCATCTCT-GGATGACGAGCTGATCCAGTGAAGCGCGCGCAGCA 779
Db |||||||
QY 868 CGGAAGCAGACAGACCATCATCTCTGAGATGACGAGCTGATCCAGTGAAGCGCGCGCA-CA 926
Db |||||||
QY 780 GCTGGCGGGAAACGGCGGGCCCCCGAGGGCAGCTCGAGCTGTGTACAGTCTCTGCTGTGA 839
Db |||||||
QY 927 GCTGGCGGGAAACGGCGGGCCCCCGAGGGCAGCTCGAGCTGTGTACAGTCTCTGCTGTGA 986
Db |||||||
QY 840 GAGTTGGCGGAGATCATCTGGCAGAACCG 869
Db |||||||
QY 987 G-AGTTGGCGGAGATCATCTGGMRACCG 1015
Db |||||||

RESULT 9
LOCUS BU508310 909 bp mRNA linear EST 12-SEP-2002
DEFINITION AGENCOURT 10094472 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:6502375
5', mRNA sequence.
ACCESSION BU508310
VERSION BU508310.1 GI:22814543
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 909)
NIH-MGC http://mgi.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov

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Tissue Procurement: ATCC
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: L1AM14058 row: f column: 08
High quality sequence stop: 638.

FEATURES
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/note="Organ: uterus; Vector: pCMV-SPORT6; Site 1: Not I; Site 2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2.1 kb."

ORIGIN
Query Match 34.1%; Score 805.8; DB 5; Length 909;
Best Local Similarity 97.9%; Pred. No. 9.7e-190;
Matches 890; Conservative 0; Mismatches 12; Indels 7; Gaps 7;

QY 1048 GCCACTGTCGCTGCTGCTGGGGGAAAGCTGAACGTGCACATGAACCCCCCGAGTG 1107
DB 1 GCCACTGTCGCTGCTGCTGGGGGAAAGCTGAACGTGCACATGAACCCCCCGAGTG 60
QY 1108 AAGGCCACCATCATCAGTGAGCAGCAGCCCAAGTCTCTGCTCAAGAACGAGAACACCCGC 1167
DB 61 AAGGCCACCATCATCAGTGAGCAGCAGCCCAAGTCTCTGCTCAAGAACGAGAACACCCGC 120
QY 1168 AATGATTACAGTGGCGAGATCTGAACAACTGCTGCTCATGGAGTACCACCAAGCCACA 1227
DB 121 AATGATTACAGTGGCGAGATCTGAACAACTGCTGCTCATGGAGTACCACCAAGCCACA 180
QY 1228 GGCACCTTAGTGCCCACTTCAGGAATATGCTGCTGAACCAATTAAGAGTGCAGACCGT 1287
DB 181 GGCACCTTAGTGCCCACTTCAGGAATATGCTGCTGAACCAATTAAGAGTGCAGACCGT 240
QY 1288 CGTGGGCGAGTGGTGACAGAGAAATTTACAATCCTGTTTGAATCCAGTTCACT 1347
DB 241 CGTGGGCGAGTGGTGACAGAGAAATTTACAATCCTGTTTGAATCCAGTTCACT 300
QY 1348 GTTGTGGAATGAGCTGGTGTTCCTCAAGTCAAGACCTGCTGCTGCCAGTGGTGTATC 1407
DB 301 GTTGTGGAATGAGCTGGTGTTCCTCAAGTCAAGACCTGCTGCTGCCAGTGGTGTATC 360
QY 1408 GTTCATGCGACGAGGACAAATGCGACGCGCACTGTCTCTGCGGCAATGCTTTTGCA 1467
DB 361 GTTCATGCGACGAGGACAAATGCGACGCGCACTGTCTCTGCGGCAATGCTTTTGCA 420
QY 1468 GAGCTGCGAGGTGCGATTTGCGCTGCTGCAAAAGTCTGTGCGCCACAGCTGTGAG 1527
DB 421 GAGCTGCGAGGTGCGATTTGCGCTGCTGCAAAAGTCTGTGCGCCACAGCTGTGAG 480
QY 1528 GCGCTCAACATGAATTTCAAGGCCAAAGTCAGAGCAACCGGGGCTGACCAAGGAGAAC 1587
DB 481 GCGCTCAACATGAATTTCAAGGCCAAAGTCAGAGCAACCGGGGCTGACCAAGGAGAAC 540
QY 1588 CTCGTGTTCTGGCGCAGAACTGTTCAACACAGCAGCAGCCACTCGAGGACTACAGT 1647
DB 541 CTCGTGTTCTGGCGCAGAACTGTTCAACACAGCAGCAGCCACTCGAGGACTACAGT 600
QY 1648 GGCCTGCTGTGCTCTGTCCAGTTTCAACAGGAGAAATTTACAGGACGGAATTTACACT 1707
DB 601 GGCCTGCTGTGCTCTGTCCAGTTTCAACAGGAGAAATTTACAGGACGGAATTTACACT 660
QY 1708 TTCTGGCAATGTTTGAGGTGTGATGGAAGTGTAAAAAACAATCTCAAGCTCATTTGG 1767

DB 661 TTCTGGCAATGTTTGTGACGGTGTGATGGAAGTGT-AAAAAACATCTCAAGCCTCATGG 719
QY 1768 AATGATGGGGCA-TTTTGGGTTTGTAAACAAGCAACAGG-CCCATGACCTACTGATTA 1825
DB 720 AATGATGGGGCAATTTTGGGTTTGTAAACAAGCAACAGGCCCCCATCTACTCATTA 779
QY 1826 ACAAGCCAGATGGGACCTTCT-CTGAGATTTCAGTCACTCAG-AAATTGGCGGCATCAC 1883
DB 780 ACAAGCCAGATGGGACCTTCTCTCCCTGAGATTTCAGTCACTCAGAAAAATTTGGCGCATCAC 839
QY 1884 CA-TTGCTTGGAAAGTTGATCTCAGGAAGAAAGTTTTCGAAT-CTGATGCTTTTACC 1941
DB 840 CATTTGCTTGGAAAGTTGATCTTTCGAAAAAGAGTTTTCGAATCCGAGGCTTTTACC 899
QY 1942 ACCAGAGAC 1950
DB 900 ACCCAAAAC 908

RESULT 10
LOCUS B0706867
DEFINITION B0706867 895 bp mRNA linear EST 16-JUL-2002
5', mRNA sequence.
ACCESSION B0706867
VERSION B0706867.1 GI:21845766
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1 (bases 1 to 895)
AUTHORS NIH-MGC http://mgc.nci.nih.gov/.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgabs-r@mail.nih.gov
Tissue Procurement: Dr. Mark Watson
cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: L1CM2465 row: d column: 08
High quality sequence stop: 712.

FEATURES
source
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/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6277975"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH MGC 113"
/note="Organ: spleen; Vector: pOTB7; Site 1: XhoI; Site 2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."

ORIGIN
Query Match 34.0%; Score 804; DB 5; Length 895;
Best Local Similarity 99.4%; Pred. No. 2.7e-189;
Matches 807; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1553 AAGTGCAGACAACCGGGCCTGACCAAGGAGAACCTGTCTTCTGCGCAGAACTGT 1612
DB 1 AAGTGCAGACAACCGGGCCTGACCAAGGAGAACCTGTCTTCTGCGCAGAACTGT 60
QY 1613 TCAACAACAGCAGCAGCCACCTGGAGGACTACAGTGGCCTGTCTGTGCTGCCAGT 1672


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661 CTCACATAACATGTATACACAGAACCTGACTCAGTCTTGACACCATGGGACTTCG 720
2273 ATCTGGAGACACATGACGCTAGCGCGCTGTGTGGAGAGCTCTGGCGCGCAATGG 2332
721 ATCTGGAGGACAC-ATGGACGTAAACGCGCGTGTGTGGAGAGCTCTGGCGCGCAATGG 779
2333 ACAGTCA-GTGGATCCCGCAGCACAATCGTGA 2364
780 ACAGTCAGTGGATCCCGAAACGACAAATCGTGA 812

RESULT 12
LOCUS BX431739 978 bp mRNA linear EST 04-MAY-2004
DEFINITION BX431739 Homo sapiens FETAL LIVER Homo sapiens cDNA clone
CSODM003YD01 5-PRIME, mRNA sequence.
ACCESSION BX431739
VERSION BX431739.1 GI:30783021
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 978)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
JOURNAL
COMMENT
Contact: Genoscope
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: secref@genoscope.cns.fr, Web : www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoRV sites of the pCMVSPORT 6 vector. Library
was not normalized. Library was constructed by Life Technologies, a
division of Invitrogen.
This sequence belongs to sequence cluster 8244.r
For more information about this cluster, see
http://www.genoscope.cns.fr/cdna?S=CSOBAG063ZA12_CS06041_1&c=8244.r

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FEATURES

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/clone="CSODM003YD01"
/tissue_type="FETAL LIVER"
/dev_stage="fetal"
/clone_lib="Homo sapiens FETAL LIVER"
/note="Organ: liver; Vector: pCMVSPORT 6; 1st strand cDNA
was primed with a NotI-oligo(dT) primer. Five prime end
enriched, double-strand cDNA was digested with Not I and
cloned into the Not I and EcoRV sites of the pCMVSPORT 6
vector. Library was not normalized."

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ORIGIN

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Query Match 32.9%; Score 778.4; DB 5; Length 978;
Best Local Similarity 89.6%; Pred. No. 6.8e-183;
Matches 881; Conservative 0; Mismatches 94; Indels 8; Gaps 4;

QY 590 GTCTGAGCGGAGAGCGGCCCTCCAGCAGAACAGTGCTCTGGAGGCTGTGGTGCAGC 649
DB 1 GTCTGAGCGGAGAGCGGCCCTCCAGCAGAACAGTGCTCTGGAGGCTGTGGTGCAGC 60

QY 650 GTGAGCAGACAGACTGCAGCAGTACCGGTGGAGTGCCTCCGAGAGCACCAAGAGACCC 709
DB 61 GTGAGCAGACAGACTGCAGCAGTACCGGTGGAGTGCCTCCGAGAGCACCAAGAGACCC 120

QY 710 TGCAGTGTCTGCGGAGCAGCAGACCATCATCTGTGATGACGAGCTGATCCAGTGGAGAC 769
DB 121 TGCAGTGTCTGCGGAGCAGCAGACCATCATCTGTGATGACGAGCTGATCCAGTGGAGAC 180

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QY 770 GCGCGCAGCAGCTGCGCCGGGAAACGCGCGGCCCCCGAGGGCAGCTGAGCTGCTACAGT 829
DB 181 GCGCGCAGCAGCTGCGCCGGGAAACGCGCGGCCCCCGAGGGCAGCTGAGCTGCTACAGT 240
QY 830 CCTGGTGTGAGAAAGTTGGCGGAGATCATCTGGCAGAACCGGCAGCAGATCCGACGGCTG 889
DB 241 CCTGGTGTGAGAAAGTTGGCGGAGATCATCTGGCAGAACCGGCAGCAGATCCGACGGCTG 300
QY 890 AGCACCTCTGCGCAGCAGCTGCCCATCCCGCGCCCAAGTGGAGGAGATGCTGGCCGAGGTCA 949
DB 301 AGCACCTCTGCGCAGCAGCTGCCCATCCCGCGCCCAAGTGGAGGAGATGCTGGCCGAGGTCA 360
QY 950 ACGCCACCATCACCGACATTATCTCAGCCCTGGTGACCAAGCAGCAGCTTCATATTGAGAAC 1009
DB 361 ACGCCACCATCACCGACATTATCTCAGCCCTGGTGACCAAGCAGCAGCTTCATATTGAGAAC 420
QY 1010 AGCCTCTCAGTCTGTGAGAGACCCAGACCAAGTTTGCAGCCACTGTGCGCGCTGCTGGTGG 1069
DB 421 AGCCTCTCAGTCTGTGAGAGACCCAGACCAAGTTTGCAGCCACTGTGCGCGCTGCTGGTGG 480
QY 1070 GCGGGAAGCTGAACGTTGCACATGAACCCCCCAGGTGAAGGCCACCATCATCAGTGAAGC 1129
DB 481 GCGGGAAGCTGAACGTTGCACATGAATCCCCCAGGTGAAGGCCACCATCATCAGTGAAGC 540
QY 1130 AGCAGGCCCAAGTCTCTGCTCAAGAACGAGAACACCCGCAATGATTACAGTGGCGAGATCT 1189
DB 541 AGCAGGCCCAAGTCTCTGCTTAAATAATGAGAACACCCGCAACGAGTGCAGTGGTGAATCC 600
QY 1190 TGAACAACCTGCTGCTCATGTGAGTACCAAGCAGCAGCAGCCCTTAGTGCCTTCA 1249
DB 601 TGAACAACCTGCTGCTCATGTGAGTACCAAGCAGCAGCAGCCCTTAGTGCCTTCA 660
QY 1250 GGAATATGCTCCCTGAAACGAATTAAGAGGTTCAGACCCGTCGTGGGCGCAGAGTCGGTGACAG 1309
DB 661 GGAATATGCTCCCTGAAAGAGGATCAAGCGTCTGACCCGCGGNGTGACAGTCCGTCGACAG 720
QY 1310 AAGAAAAATTTACAAATCCTGTTTGAATCCCAAGTTCAGTGTGGTGGAAATAGCTGGTTT 1369
DB 721 AGGAGAAGTTTCACAGTCCCTGTTGAGTCTCAGTTTGGCAGCAATGAGCTTGTGT 780
QY 1370 TTCAAGTCAAGACCCCTGTCCTGCCAGTGGTGGTGTGATGTTTCATGCGCAGCAGGACACA 1429
DB 781 TTCAAGTGAAGACTCTGTNCCCTACTCTGTGGTGTGTCATCGTCACCGGAGCCAGGACCCAC 840
QY 1430 ATGCGAGCGCCACATGTTCTCTGGGACAATGCTTTTGACAGAGCTCGCAGGGGTGCCATTGG 1489
DB 841 ATGCCACCGGCTACTGTGCTGTGGGAC-ATGCTTTGCTGAGCC-GGCAGGGTGCCTATTGG 898
QY 1490 CCGTGCCTTGACAAAGTGTGTGGCCACAGCTGTGTGAGGCGCTCAACATGAAATTCAGG 1549
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QY 1550 CCGAAGTGCAGAGCAACCGGGGC 1572
DB 955 CC--AATGCAAAAGAAACCGGGGC 975

RESULT 13
LOCUS BQ941072
DEFINITION BQ941072 917 bp mRNA linear EST 21-AUG-2002
5', mRNA sequence.
AGENCOURT_8853726 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:6374059
ACCESSION BQ941072
VERSION BQ941072.1 GI:22356550
KEYWORDS EST.
ORGANISM Homo sapiens (human)
SOURCE Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 917)
NIH-MGC http://mgi.nci.nih.gov/.
AUTHORS National Institutes of Health, Mammalian Gene Collection (MGC)
TITLE Unpublished (1999)
JOURNAL

```

COMMENT Contact: Robert Strausberg, Ph.D.
Email: ccapbs-remail.nih.gov
Tissue Procurement: DClD/DTF/Gazdar
cDNA Library Preparation: Rubin Laboratory
DNA Sequencing by: The I.M.A.G.E. Consortium (LLNL)
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: L1CM2552 row: g column: 20
High quality sequence stop: 591.

FEATURES Location/Qualifiers
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/clone="IMAGE:6374059"
/tissue_type="large cell carcinoma"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH_MGC_18"
/note="Organ: lung; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dr priming. Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGACAGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."

ORIGIN
Query Match 32.4%; Score 767; DB 5; Length 917;
Best Local Similarity 95.5%; Pred. No. 4.7e-180;
Matches 843; Conservative 0; Mismatches 35; Indels 5; Gaps 5;

Qy 448 GAGCTGGACCTGGTCAACGAGACACAGAGATGAGTAAAGCTGCAGACACTCAG 507
Db 1 GAGCTGGACCTGGTCAACGAGACACAGAGATGAGTAAAGCTGCAGACACTCAG 60

Qy 508 GAGTACTTATCATCCAGTACAGAGAGCTGAGGATCCAGCTGATTTGGCCCGCTG 567
Db 61 GAGTACTTATCATCCAGTACAGAGAGCTGAGGATCCAGCTGATTTGGCCCGCTG 120

Qy 568 GCCAGCTGAGCCCGCCAGAGCGTCTAGCGCGGAGAGCGCCCTCCAGCAGAACAGCTG 627
Db 121 GCCAGCTGAGCCCGCCAGAGCGTCTAGCGCGGAGAGCGCCCTCCAGCAGAACAGCTG 180

Qy 628 TCTCTGGAGGCTGGTTGACGCTGAGGCACAGACACTGCAGCAGTACCGCGTGGAGCTG 687
Db 181 TCTCTGGAGGCTGGTTGACGCTGAGGCACAGACACTGCAGCAGTACCGCGTGGAGCTG 240

Qy 688 CCCGAGAAGCACAGAGACCTGAGCTGTGCGGAAGCAGAGACCATCATCTGTGAT 747
Db 241 CCCGAGAAGCACAGAGACCTGAGCTGTGCGGAAGCAGAGACCATCATCTGTGAT 300

Qy 748 GACGAGCTGATCCAGTGAAGCGCGCAGCAGCTGGCGGGAACCGCGGCCCGCCGAG 807
Db 301 GACGAGCTGATCCAGTGAAGCGCGCAGCAGCTGGCGGGAACCGCGGCCCGCCGAG 360

Qy 808 GGCAGCTGGACGTGCTACAGTCTCTGTGTGAGAAGTTGGCGGAGATCATCTGGCAGAAC 867
Db 361 GGCAGCTGGACGTGCTACAGTCTCTGTGTGAGAAGTTGGCGGAGATCATCTGGCAGAAC 420

Qy 868 CGGAGCAGATCCGAGGCTGAGACCTCTGCGCAGAGCTGCCCATCCCGGCCCGAGTG 927
Db 421 CGGAGCAGATCCGAGGCTGAGACCTCTGCGCAGAGCTGCCCATCCCGGCCCGAGTG 480

Qy 928 GAGGAGATGTCGGCGAGGTCAAGCCACCATCAGGACATTAATCTAGCCCTGTGACC 987
Db 481 GAGGAGATGTCGGCGAGGTCAAGCCACCATCAGGACATTAATCTAGCCCTGTGACC 540

Qy 988 AGCAGCTTTCATTTGAGAAGCAGCTCTCTCAGGTCTCTGAGACCCAGCAAGTTTGCA 1047
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Db 601 GCCACTGTGGCCCTGTGTGGTGGGGAAGCTGAACGTGCACATGAACCCCCCAGGT 660

Qy 1107 GAAGGCCACCATCATCAGTGAGCAGAGCGCAAGTCTCTGCTCAAGAACGAGAACA-CCC 1165
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Qy 1166 GCAATGATTACAGTGGCGAGATCTTGAACAACCTGCTGCTCATGAGTACCAAG-CC 1224
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Qy 1225 ACAGGCACCTTACT-CCCCACTTCAGGAATATGTCCC-TGAACGAATTAAGAGTCTAG 1282
Db 781 CCGGCGACCTTACTTGTGGCCCACTTCAGGAATATGTCCCTTGAACGAATTTAAAGGCCA 840

Qy 1283 ACCGTGCTGGGGGAGAGTCCGTGCACAGAAGAAAAATTTACAAT 1325
Db 841 GACCCGTGGGGGGCAAAAGTCCGGGAACAGAGAAAAAT 883

RESULT 14
AL576279/c
LOCUS 991 bp mRNA linear EST 06-APR-2004
DEFINITION AL576279 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens cDNA
clone CSODI073YN20 3-PRIME, mRNA sequence.
ACCESSION AL576279
VERSION AL576279.3 GI:46249147
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1 (bases 1 to 991)
AUTHORS Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
TITLE Full-length cDNA libraries and normalization
JOURNAL Unpublished (2001)
COMMENT On Feb 16, 2001 this sequence version replaced gi:31314566.
Contact: Genoscope
Genoscope - Centre National de Sequencage
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library
was normalized. Library was constructed by Life Technologies, a
division of Invitrogen. This sequence belongs to sequence cluster
8244.r
For more information about this cluster, see
http://www.genoscope.cns.fr/cdna?s=CSODI073DGI0NP1&c=8244.r.

FEATURES Location/Qualifiers
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/tissue_type="PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="1st strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector. Library was normalized."

ORIGIN
Query Match 31.9%; Score 753; DB 1; Length 991;
Best Local Similarity 94.3%; Pred. No. 1.5e-176;
Matches 766; Conservative 29; Mismatches 15; Indels 2; Gaps 2;

Qy 1479 GGTGCCATTGGCCGTGCTGACAAAGTGTGTGGCCACAGCTGTGTGAGGCGCTCAACAT 1538
Db 987 GKGCCWTTGSGKTGCTTCACAMAGTG-TKTGCCACAGCTKTGTGA-GCGCTCAACAT 930

Db	493	GAGACTTGAATTACCTTATCTACGTGTTTCCTGATCGCCAAAGATGAAGTACTCCA	552
Qy	2042	AATACTACACACCAAGTTCCTCGCAGTCTGCTACTGCTAAAGCTGTTGATGGATACGTGA	2101
Db	553	AATACTACACACCAAGTTCCTCGCAGTCTGCTACTGCTAAAGCTGTTGATGGATACGTGA	612
Qy	2102	AGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAAAGCATCTGCAGATGCCGGGGCG	2161
Db	613	AGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAAAGCATCTGCAGATGCCGGGGCG	672
Qy	2162	GCAGCGCCACGTACATGACCAAGGCCCCCTCCCGAGTGTGTGTCGCCAGGCTCACTATA	2221
Db	673	GCAGCGCCACGTACATGACCAAGGCCCCCTCCCGAGTGTGTGTCGCCAGGCTCACTATA	731
Qy	2222	ACATGTACCCACAGAACCCCTGACTCAGTCCTTGACACCGA	2261
Db	732	ACATGTACCCACAGAACCCCTGACTCAGTCCTTGACACCGA	771

Search completed: May 17, 2005, 09:24:31
Job time : 11371 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: May 16, 2005, 18:30:18 ; Search time 1828 Seconds
(without alignments)
7655.508 Million cell updates/sec

Title: US-10-052-482-162

Perfect score: 2364

Sequence: 1 atgctgtgtggatacaagc.....tccgcgcgcacacaatcgtga 2364

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 4390206 seqs, 2959870667 residues

Total number of hits satisfying chosen parameters: 8780412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

N Geneseq_16Dec04:*

- 1: geneseqn1980s:*
- 2: geneseqn1990s:*
- 3: geneseqn2000s:*
- 4: geneseqn2001as:*
- 5: geneseqn2001bs:*
- 6: geneseqn2002as:*
- 7: geneseqn2002bs:*
- 8: geneseqn2003as:*
- 9: geneseqn2003bs:*
- 10: geneseqn2003cs:*
- 11: geneseqn2003ds:*
- 12: geneseqn2004as:*
- 13: geneseqn2004bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2364	100.0	2364	9	ADA02656 Human STA
2	2364	100.0	2364	10	ADB72394 Human STA
3	2364	100.0	2364	10	Ade95904 Human STA
4	2364	100.0	2782	6	ABZ35457 Human gen
5	2364	100.0	2782	6	ABK72299 Lymphoma
6	2364	100.0	2782	9	ADA02655 Human STA
7	2364	100.0	2782	10	ADB72393 Human STA
8	2364	100.0	2782	10	Ade95903 Human DNA
9	2356	99.7	2364	12	ADP82726 Human STA
10	2356	99.7	2716	6	ABZ35008 Human gen
11	2356	99.7	2716	6	ABK84353 Human cDN
12	2313.2	97.9	2779	12	ADM79353 Human lym
13	2170	91.8	2170	6	ABK51482 Human cDN
14	2073.2	87.7	2776	13	ACN40207 Tumour-as
15	1991.2	84.2	2671	10	ADB59436 Toxicity-
16	1991.2	84.2	2671	10	ADB53016 Primary r
17	1978.4	83.7	2940	6	ABK72273 Lymphoma
18	1976.8	83.6	2361	9	ADA02653 Mouse Sta
19	1976.8	83.6	2361	10	ADB72391 Mouse Sta
20	1976.8	83.6	2361	10	ADE95901 Mouse Sta

21	1976.8	83.6	2361	10	ACC79609	Acc79609 Mouse Sta
22	1976.8	83.6	2361	12	ADP82730	Adp82730 Mouse Sta
23	1976.8	83.6	2574	9	ADA02652	Ada02652 Mouse Sta
24	1976.8	83.6	2574	10	ADB72390	Adb72390 Mouse Sta
25	1976.8	83.6	2574	10	ADE95900	Ade95900 Mouse DNA
26	1972	83.4	2940	12	ADM79327	Adm79327 Mouse lym
27	1894.8	80.2	2385	2	AAT33590	Aat33590 Signal tr
28	1894.8	80.2	2385	12	ADP82724	Adp82724 Human STA
29	1894.8	80.2	3120	2	AAV71029	Aav71029 Green flo
30	1894.8	80.2	3138	2	AAV71041	Aav71041 Stat5-gre
31	1894.8	80.2	3714	5	AAA89231	Aaa89231 Human sig
32	1894.8	80.2	3714	11	ADI32144	Adi32144 Human cDN
33	1894.8	80.2	4279	6	ABK84328	Abk84328 Human cDN
34	1894.8	80.2	4279	10	ADH28822	Adh28822 Human chr
35	1894.8	80.2	4298	12	ADL83236	Adl83236 Human PRO
36	1823.6	77.1	2538	12	ADQ84604	Adq84604 Human tum
37	1770	74.9	2382	10	ACC79608	Acc79608 Mouse Sta
38	1770	74.9	2382	12	ADP82728	Adp82728 Mouse Sta
39	1766.8	74.7	2382	12	ADP82732	Adp82732 STAT5A 1*
40	1766.8	74.7	2382	12	ADP82735	Adp82735 STAT5A 1*
41	1741	73.6	2818	2	AAT10554	Aat10554 Sheep mam
42	506	21.4	596	12	ADN00006	Adn00006 Human STA
43	428	18.1	446	12	ADN00007	Adn00007 Human STA
44	402.2	17.0	495	5	AAA89241	Aaa89241 Human STA
45	400.2	16.9	824	6	ABQ54442	Abq54442 Human ova

ALIGNMENTS

RESULT 1

ADA02656
ID ADA02656 standard; cDNA; 2364 BP.

XX ADA02656;

DT 06-NOV-2003 (first entry)

DE Human STAT5B carcinoma associated coding sequence, SEQ ID NO:1174.

XX Human; carcinoma associated; oncogene; carcinoma; cancer; breast;
KW prostate; lymphoma; leukaemia; cytostatic; gene therapy; drug screening;
KW gene; ss.

XX Homo sapiens.

XX WO2003057146-A2.

XX 17-JUL-2003.

XX 26-DEC-2002; 2002WO-US041414.

XX 26-DEC-2001; 2001US-00035832.

XX (SAGR-) SAGRES DISCOVERY.

XX Morris DW;

XX WPI; 2003-587068/55.

XX New recombinant nucleic acid encoding carcinoma associated protein,
PT useful for preparing compositions for treating carcinomas.

XX Claim 1; SEQ ID NO 1174; 245pp; English.

XX The invention relates to recombinant carcinoma associated (CA) nucleic
CC acid sequences from mouse and human (ADA01482-ADA03094), and to
CC recombinant carcinoma associated proteins (CAP) encoded by them. The
CC invention also encompasses expression vectors and host cells comprising a
CC CA nucleic acid, a polypeptide (especially an antibody) that specifically
CC binds to the protein, and a biochip comprising CA nucleic acid or
CC fragments thereof. The sequences of the invention were identified using
CC oncogenic retroviruses, which insert into the genome of the host organism

CC at random. Many of these do not carry transduced host oncogenes or
CC pathogenic trans-acting viral genes, meaning that cancer incidence is a
CC direct consequence of the effects of proviral integration into host
CC protooncogenes. The CA nucleic acid sequences can be used to diagnose
CC carcinoma (especially breast cancer, prostate cancer, lymphoma or
CC leukaemia) or a propensity to carcinoma by determination of the sequence
CC of a CA gene, or by determination of CA gene expression in particular
CC tissues. CA nucleic acids, proteins and antibodies are also useful as
CC therapeutic agents and in screening and evaluating drug candidates. The
CC present sequence represents a specifically claimed human CA nucleic acid
CC sequence of the invention. Note: The complete sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pt_sequences.

XX SQ Sequence 2364 BP; 594 A; 636 C; 666 G; 468 T; 0 U; 0 Other;

Query Match 100.0%; Score 2364; DB 9; Length 2364;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2364; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	ATGGCTGTGGATACAAAGCTCAGCAGCTCAAGGAGAAGCCCTTCATCAGATGCAAGCG	60
Db	1	ATGGCTGTGGATACAAAGCTCAGCAGCTCAAGGAGAAGCCCTTCATCAGATGCAAGCG	60
Qy	61	TTATATGCCAGCATTTTCCCATTTAGGTGGGCAATTTATCCAGTGGATTGAAGC	120
Db	61	TTATATGCCAGCATTTTCCCATTTAGGTGGGCAATTTATTTATCCAGTGGATTGAAGC	120
Qy	121	CAAGCATGGGACTCAGTAGATCTTGATAATCCAGGAGAACATTAAGGCCACCCAGCTC	180
Db	121	CAAGCATGGGACTCAGTAGATCTTGATAATCCAGGAGAACATTAAGGCCACCCAGCTC	180
Qy	181	CTGAGGCGCTGTGTCAGGAGCTCAGAAAGGACAGCACAGCTCCAGACAGATGAGCGG	240
Db	181	CTGAGGCGCTGTGTCAGGAGCTCAGAAAGGACAGCACAGCTCCAGACAGATGAGCGG	240
Qy	241	TTTTTACTGAGATCAAGCTGGGCACTATGCCACAGCTCCAGACAGATGAGCGG	300
Db	241	TTTTTACTGAGATCAAGCTGGGCACTATGCCACAGCTCCAGACAGATGAGCGG	300
Qy	301	TGCCCCATGAGCTGGTCCGCTGCATCCGCGCATATTTACAAATGAACAGAGTTGGTC	360
Db	301	TGCCCCATGAGCTGGTCCGCTGCATCCGCGCATATTTACAAATGAACAGAGTTGGTC	360
Qy	361	CGAAGCCCAATAGTGTCTCCAGCTGGAGCCTTGTGATGCCATGTCCCAAAA	420
Db	361	CGAAGCCCAATAGTGTCTCCAGCTGGAGCCTTGTGATGCCATGTCCCAAAA	420
Qy	421	CACCTCCAGATCAACAGAGCTTTGAGAGCTGGCACTGCTCAGCAGGACACAGAGAT	480
Db	421	CACCTCCAGATCAACAGAGCTTTGAGAGCTGGCACTGCTCAGCAGGACACAGAGAT	480
Qy	481	GAGTTAAAAAGCTGCAGCAGACTCAGAGTACTTTCATCCTCAGTACCAGGAGCCTG	540
Db	481	GAGTTAAAAAGCTGCAGCAGACTCAGAGTACTTTCATCCTCAGTACCAGGAGCCTG	540
Qy	541	AGGATCCAAGTCAAGTTGGCCCGCTGCCAGCTGAGCCCCCAGGAGCGTCTGAGCCGG	600
Db	541	AGGATCCAAGTCAAGTTGGCCCGCTGCCAGCTGAGCCCCCAGGAGCGTCTGAGCCGG	600
Qy	601	GAGAGCGCTCCAGCAGAGCAGTGTCTCTGAGGCGCTGTTGACGCTGAGGCACAG	660
Db	601	GAGAGCGCTCCAGCAGAGCAGTGTCTCTGAGGCGCTGTTGACGCTGAGGCACAG	660
Qy	661	ACATGACAGAGTACCGGTGGAGCTGCCAGAGACACAGAGAGACCTTGCACTGCTG	720
Db	661	ACATGACAGAGTACCGGTGGAGCTGCCAGAGAGACACAGAGAGACCTTGCACTGCTG	720
Qy	721	CGGAAGCAGCAGACCATCTCTGGATGACAGCTGATCCAGTGGAAAGCGGCGCAGAG	780
Db	721	CGGAAGCAGCAGACCATCTCTGGATGACAGCTGATCCAGTGGAAAGCGGCGCAGAG	780

Qy	781	CTGCGCGGAAACGGCGGCCCCCGAGGGCAGCTGAGCGTGTACAGTCTCTGGTGTGAG	840
Db	781	CTGCGCGGAAACGGCGGCCCCCGAGGGCAGCTGAGCGTGTACAGTCTCTGGTGTGAG	840
Qy	841	AAGTTGGCGGAGATCATCTCGCAGAACCCGGCAGCAGATCCGAGGGCTGAGCACCTCTGC	900
Db	841	AAGTTGGCGGAGATCATCTCGCAGAACCCGGCAGCAGATCCGAGGGCTGAGCACCTCTGC	900
Qy	901	CAGAGCTGCCATTCCTCCCGCCAGTGGAGGAGATGTCGCGGAGGTCAAGCCACCATC	960
Db	901	CAGAGCTGCCATTCCTCCCGCCAGTGGAGGAGATGTCGCGGAGGTCAAGCCACCATC	960
Qy	961	ACGACATATCTCAGCCCTGTGACCCAGCAGTTCATCATTTGAGAGAGCAGCTCTCTCAG	1020
Db	961	ACGACATATCTCAGCCCTGTGACCCAGCAGTTCATCATTTGAGAGAGCAGCTCTCTCAG	1020
Qy	1021	GTCTGAAAGACCCAGACCAAGTTTGCAGCCACTGTGCGCTGTGTTGGCGGGAAGCTG	1080
Db	1021	GTCTGAAAGACCCAGACCAAGTTTGCAGCCACTGTGCGCTGTGTTGGCGGGAAGCTG	1080
Qy	1081	AAGTGCACATGAACCCCCCAGGTGAAGGCCACCATCATCAGTGAAGCAGCGCCAAAG	1140
Db	1081	AAGTGCACATGAACCCCCCAGGTGAAGGCCACCATCATCAGTGAAGCAGCGCCAAAG	1140
Qy	1141	TCTCTGCTCAAGAACGAGAACACCCGCAATGATTTACAGTGGCGAGATCTTTGAACAACTGC	1200
Db	1141	TCTCTGCTCAAGAACGAGAACACCCGCAATGATTTACAGTGGCGAGATCTTTGAACAACTGC	1200
Qy	1201	TGGTTCATGAGTACCAACCAAGCCACAGGCCACCTTTAGTGCCTCCTCAGGAATATGTC	1260
Db	1201	TGGTTCATGAGTACCAACCAAGCCACAGGCCACCTTTAGTGCCTCCTCAGGAATATGTC	1260
Qy	1261	CTGAACAAATTAAGAGTCAAGCTGTCGTTGGGCGAGAGTCGGTGAAGAGAAAATTT	1320
Db	1261	CTGAACAAATTAAGAGTCAAGCTGTCGTTGGGCGAGAGTCGGTGAAGAGAAAATTT	1320
Qy	1321	ACAATCTGTGTAATCCCAAGTTTCAAGTGGTGAATCAGCTGTTTTCAAGTCAAG	1380
Db	1321	ACAATCTGTGTAATCCCAAGTTTCAAGTGGTGAATCAGCTGTTTTCAAGTCAAG	1380
Qy	1381	ACCCTGTCTGCGCAGTGTGATCGTTTCATGGCAGCCAGGACAAATGCGACGCGC	1440
Db	1381	ACCCTGTCTGCGCAGTGTGATCGTTTCATGGCAGCCAGGACAAATGCGACGCGC	1440
Qy	1441	ACTGTTCTTGGGACAAATGCTTTTGCAGAGCTGCGAGGCTGCCATTTGCGTGCCTGAC	1500
Db	1441	ACTGTTCTTGGGACAAATGCTTTTGCAGAGCTGCGAGGCTGCCATTTGCGTGCCTGAC	1500
Qy	1501	AAAGTGTGTGGCCACAGCTGTGTGAGGCGCTCAACATGAAATTCAGAGCGGAAGTGCAG	1560
Db	1501	AAAGTGTGTGGCCACAGCTGTGTGAGGCGCTCAACATGAAATTCAGAGCGGAAGTGCAG	1560
Qy	1561	AGCAACCGGCGCTGACCAAGGAGAACCTCGTTCCTGGCGCAGAAACTGTTCAACAAC	1620
Db	1561	AGCAACCGGCGCTGACCAAGGAGAACCTCGTTCCTGGCGCAGAAACTGTTCAACAAC	1620
Qy	1621	AGCAGAGCCACCTGAGGAGCTACAGTGGCTGTCTGTGCTGCTGCTGCTGCTGCTG	1680
Db	1621	AGCAGAGCCACCTGAGGAGCTACAGTGGCTGTCTGTGCTGCTGCTGCTGCTGCTG	1680
Qy	1681	GAGAAATTTACAGAGCGGAATTTACCTTCTGCGCAATGTTTGAAGTGTGATGGAAGTG	1740
Db	1681	GAGAAATTTACAGAGCGGAATTTACCTTCTGCGCAATGTTTGAAGTGTGATGGAAGTG	1740
Qy	1741	TTAAAAAATCATCTCAAGCCTCATTTGGAATGATGGGCGCAATTTTGGGGTTTGTAAA	1800
Db	1741	TTAAAAAATCATCTCAAGCCTCATTTGGAATGATGGGCGCAATTTTGGGGTTTGTAAA	1800
Qy	1801	CAACAGCGCCCATGACCTACTGATTAACAGCCAGATGGGACCTTCTCTCCTGAGATT	1860
Db	1801	CAACAGCGCCCATGACCTACTGATTAACAGCCAGATGGGACCTTCTCTCCTGAGATT	1860
Qy	1861	GACTCAGAAATTTGGCGGCATCACCATTTGCTTGGAAAGTTTGAATTTCTCAGGAAAGAA	1920

Db 1861 GACTCAGAAATGGCGCATCACATTGCTTGGAAAGTTTGATTCAGGAAGAATGTTT 1920
Qy 1921 TGGAAATCTGATGCTCTTTTACCACAGAGACTTCTCCATCAGTCCCTAGCGCGCTTG 1980
Db 1921 TGGAAATCTGATGCTCTTTTACCACAGAGACTTCTCCATCAGTCCCTAGCGCGCTTG 1980
Qy 1981 GGAGACTTGAATTAACCTTATCTACGTGTTTCTCTGATCGGCCAAAGATGAAGTATCTCC 2040
Db 1981 GGAGACTTGAATTAACCTTATCTACGTGTTTCTCTGATCGGCCAAAGATGAAGTATCTCC 2040
Qy 2041 AAATACTACACAGATTCCTCGAGTCTGCTACTGCTAAAGCTGTTGATGGATCGTG 2100
Db 2041 AAATACTACACAGATTCCTCGAGTCTGCTACTGCTAAAGCTGTTGATGGATCGTG 2100
Qy 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGC 2160
Db 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGC 2160
Qy 2161 GGCAAGCCACGTATGACAGAGCCCTCCCTCCAGCTGTGTCTCCCGAGCTCACTAT 2220
Db 2161 GGCAAGCCACGTATGACAGAGCCCTCCCTCCAGCTGTGTCTCCCGAGCTCACTAT 2220
Qy 2221 AACATGTACCCACAGAACCTGACTCAGTCTTGACACCGATGGGACTTCGATCTGGAG 2280
Db 2221 AACATGTACCCACAGAACCTGACTCAGTCTTGACACCGATGGGACTTCGATCTGGAG 2280
Qy 2281 GACCAATGGACGTAGCGCGCTGTGGAGAGCTCCTGGCGCGCAATGGACAGTCAG 2340
Db 2281 GACCAATGGACGTAGCGCGCTGTGGAGAGCTCCTGGCGCGCAATGGACAGTCAG 2340
Qy 2341 TGGATCCCGCAGCAGCAATCTGTA 2364
Db 2341 TGGATCCCGCAGCAGCAATCTGTA 2364

RESULT 2
ADB72394
ID ADB72394 standard; cDNA; 2364 BP.
XX
AC ADB72394;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human STAT5B cDNA.
XX
KW human; ss; cytostatic; gene therapy; vaccine; carcinoma; lymphomas;
KW cancer; neoplasm; adenocarcinoma; sarcoma; gene.
XX
OS Homo sapiens.
XX
FN WO2003008583-A2.
XX
PD 30-JAN-2003.
XX
PF 26-DEC-2001; 2001WO-US051291.
XX
PR 02-MAR-2001; 2001US-00798586.
PR 23-OCT-2001; 2001US-00004113.
PR 08-NOV-2001; 2001US-00052482.
PR 30-NOV-2001; 2001US-00997722.
PR 20-DEC-2001; 2001US-00034650.
XX
PA (SAGR-) SAGRES DISCOVERY.
XX
PI Morris DW, Engelhard EK;
XX
XX WPI; 2003-239337/23.
XX
PT New recombinant nucleic acid, useful for treating carcinomas, lymphomas,
PT cancers, neoplasm, adenocarcinoma, or sarcomas.
XX
PS Claim 1; SEQ ID NO 222; 2304pp; English.

XX The invention relates to a novel recombinant nucleic acid comprising a
CC nucleotide sequence selected from any of the 660 sequences fully defined
CC in the specification. A polynucleotide of the invention has cytosatic
CC activity, and may have a use in gene therapy, or in a vaccine. The
CC recombinant nucleic acids and polypeptides are useful for treating
CC carcinomas, e.g. lymphomas, cancers, neoplasm, adenocarcinoma, and
CC sarcomas. The present sequence represents a human cDNA of the invention.
XX
SQ Sequence 2364 BP; 594 A; 636 C; 666 G; 468 T; 0 U; 0 Other;

Query Match 100.0%; Score 2364; DB 10; Length 2364;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2364; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGCTCTGTGGATACAAAGCTCAGCAGCTCAAGGAGAGCCCTTCATCAGATGCAAGCG 60
Db 1 ATGCTCTGTGGATACAAAGCTCAGCAGCTCAAGGAGAGCCCTTCATCAGATGCAAGCG 60

Qy 61 TTATATGCCAGCATTTTCCATTGAGTGGCGCATTTATTTATCCAGTGGATGAAAGC 120
Db 61 TTATATGCCAGCATTTTCCATTGAGTGGCGCATTTATTTATCCAGTGGATGAAAGC 120

Qy 121 CAGCATGGGACTCAGTAGATCTTGATAATCCAGAGAACATTAAGGCCACCCAGCTC 180
Db 121 CAGCATGGGACTCAGTAGATCTTGATAATCCAGAGAACATTAAGGCCACCCAGCTC 180

Qy 181 CTGAGGCGCTGTGTGAGGAGCTGCAGAAAGGACAGACAGGTGGGGAGAGATGGG 240
Db 181 CTGAGGCGCTGTGTGAGGAGCTGCAGAAAGGACAGACAGGTGGGGAGAGATGGG 240

Qy 241 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAACACATGACCGC 300
Db 241 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAACACATGACCGC 300

Qy 301 TGCCCCATGGAGCTGGTCCGCTGCATCCGCGCATATTTGTACAATGAACAGAGTTGGTC 360
Db 301 TGCCCCATGGAGCTGGTCCGCTGCATCCGCGCATATTTGTACAATGAACAGAGTTGGTC 360

Qy 361 CGAAGCCCAACATGATGCTCCAGCTGGAGCCCTTGTGATGCCATGCTCCAGAAA 420
Db 361 CGAAGCCCAACATGATGCTCCAGCTGGAGCCCTTGTGATGCCATGCTCCAGAAA 420

Qy 421 CACCTCCAGATCAACAGAGCTTTGAGGAGCTGGGACTGGTCCAGAGGACACAGAGAT 480
Db 421 CACCTCCAGATCAACAGAGCTTTGAGGAGCTGGGACTGGTCCAGAGGACACAGAGAT 480

Qy 481 GAGTAAAAAGCTGCAGAGACTCAGAGGATCTTTCATCTATCCAGTACAGAGAGCCTG 540
Db 481 GAGTAAAAAGCTGCAGAGACTCAGAGGATCTTTCATCTATCCAGTACAGAGAGCCTG 540

Qy 541 AGGATCCAAGCTCAGTTTGGCCCGCTGGCCCGCTGAGCCCGCTGAGCCCGCTGAGCCCG 600
Db 541 AGGATCCAAGCTCAGTTTGGCCCGCTGGCCCGCTGAGCCCGCTGAGCCCGCTGAGCCCG 600

Qy 601 GAGACGGCCCTCCAGCAGAGAGCAGTGTCTCTGAGAGCTGCTGAGCCGCTGAGCCAG 660
Db 601 GAGACGGCCCTCCAGCAGAGAGCAGTGTCTCTGAGAGCTGCTGAGCCGCTGAGCCAG 660

Qy 661 ACCTGCAGCAGTACCCCGTGGAGCTCCCGAGAGGACCAAGAGAGCCCTGAGCTGTG 720
Db 661 ACCTGCAGCAGTACCCCGTGGAGCTCCCGAGAGGACCAAGAGAGCCCTGAGCTGTG 720

Qy 721 CGAAGCAGCAGACCATCTCTGGATGACAGAGTGTATCCAGTGGAGAGCCGCGCAGCAG 780
Db 721 CGAAGCAGCAGACCATCTCTGGATGACAGAGTGTATCCAGTGGAGAGCCGCGCAGCAG 780

Qy 781 CTGSCCGGGAACGGCGGGCCCCCGAGCAGCTGGACGCTGCTACAGTCTCTGTGTGAG 840
Db 781 CTGSCCGGGAACGGCGGGCCCCCGAGCAGCTGGACGCTGCTACAGTCTCTGTGTGAG 840

Qy 841 AAGTTGGCGGAGATCATCTGCGAGAACCGGCGAGCAGATCCGACGGGTGAGCCTCTGC 900
Db 841 AAGTTGGCGGAGATCATCTGCGAGAACCGGCGAGCAGATCCGACGGGTGAGCCTCTGC 900

Db 841 AAGTTGGCGGAGATCATCTGCAGAA CGGCGAGCAGATCCGACGGCTGACCACTCTGC 900
Qy 901 CAGCAGCTGCCATCCCGCGCCAGTGGAGAGATGCTGGCCGAGGTCAACGCCACCATC 960
Db 901 CAGCAGCTGCCATCCCGCGCCAGTGGAGAGATGCTGGCCGAGGTCAACGCCACCATC 960
Qy 961 ACGGACATTAATCTCAGCCCTGGTGACCAAGCAGCTTCATCATTGAGAAGCAGCCTCCTCAG 1020
Db 961 ACGGACATTAATCTCAGCCCTGGTGACCAAGCAGCTTCATCATTGAGAAGCAGCCTCCTCAG 1020
Qy 1021 GTCTGTAAGACCCAGACCAAGTTTGCAGCAGCACTGTGCGCCTGTGTTGGGGGGAAGCTG 1080
Db 1021 GTCTGTAAGACCCAGACCAAGTTTGCAGCAGCACTGTGCGCCTGTGTTGGGGGGAAGCTG 1080
Qy 1081 AACGTGCACATGAACCCCCCAGGTGAAGGCCACCATCATCAGTGAAGCAGCAGGCCAAG 1140
Db 1081 AACGTGCACATGAACCCCCCAGGTGAAGGCCACCATCATCAGTGAAGCAGCAGGCCAAG 1140
Qy 1141 TCTCTGCTCAAGAACGAGAACCCCGCAATGATTACAGTGGCGAGATCTTGAACAACTGC 1200
Db 1141 TCTCTGCTCAAGAACGAGAACCCCGCAATGATTACAGTGGCGAGATCTTGAACAACTGC 1200
Qy 1201 TGCGTCAATGAGTACCAAGCCACAGGCAACCTTAGTGCCCACTTCAGGAATATGTC 1260
Db 1201 TGCGTCAATGAGTACCAAGCCACAGGCAACCTTAGTGCCCACTTCAGGAATATGTC 1260
Qy 1261 CTGAAACGAAATTAAGAGGTCAAGCCGTGCTGGGGCAGAGTGGTGACAGAAAGAAATTT 1320
Db 1261 CTGAAACGAAATTAAGAGGTCAAGCCGTGCTGGGGCAGAGTGGTGACAGAAAGAAATTT 1320
Qy 1321 ACAATCTGTTGAATCCAGTTCAGTGGTGGGAAATGAGCTGGTTTTCAAGTCAAG 1380
Db 1321 ACAATCTGTTGAATCCAGTTCAGTGGTGGGAAATGAGCTGGTTTTCAAGTCAAG 1380
Qy 1381 ACCCTGTCCCTGCCAGTGGTGGTATGTTTCATGGCAGCAGGACAACAATGCGACGGCC 1440
Db 1381 ACCCTGTCCCTGCCAGTGGTGGTATGTTTCATGGCAGCAGGACAACAATGCGACGGCC 1440
Qy 1441 ACTGTTCTCTGGGCAATGCTTTTGCAGAGCCTGGCAGGGTGCCATTTGCCGTGCCCTGAC 1500
Db 1441 ACTGTTCTCTGGGCAATGCTTTTGCAGAGCCTGGCAGGGTGCCATTTGCCGTGCCCTGAC 1500
Qy 1501 AAAGTGTGTGGCCACAGCTGTGAGGCGCTCAACATGAATTCAGAGCGGCAAGTGCAG 1560
Db 1501 AAAGTGTGTGGCCACAGCTGTGAGGCGCTCAACATGAATTCAGAGCGGCAAGTGCAG 1560
Qy 1561 AGCAACCGGGCCCTGACCAAGGAGAACTCTGTGTTCTGGCGCAGAAACTGTTCAACAAC 1620
Db 1561 AGCAACCGGGCCCTGACCAAGGAGAACTCTGTGTTCTGGCGCAGAAACTGTTCAACAAC 1620
Qy 1621 AGCAGAGCCACCTGGAGGACTACAGTGGCTGTCTGTGCTCTGGTCCCAAGTTCACAGG 1680
Db 1621 AGCAGAGCCACCTGGAGGACTACAGTGGCTGTCTGTGCTCTGGTCCCAAGTTCACAGG 1680
Qy 1681 GAGAAATTACAGACCGGAATTAACACTTTCGGAATGGTTTGAACGGTGTGATGGAAGTG 1740
Db 1681 GAGAAATTACAGACCGGAATTAACACTTTCGGAATGGTTTGAACGGTGTGATGGAAGTG 1740
Qy 1741 TTAATAAACAATCTCAAGCCTCATTTGAATGATGGGCGCAATTTTGGGGTTTGTAAACAAG 1800
Db 1741 TTAATAAACAATCTCAAGCCTCATTTGAATGATGGGCGCAATTTTGGGGTTTGTAAACAAG 1800
Qy 1801 CAACAGGCCCATGACCTACTGATTAAACAAGCCAGATGGGACCTTCCTCCTGAGATTTCAGT 1860
Db 1801 CAACAGGCCCATGACCTACTGATTAAACAAGCCAGATGGGACCTTCCTCCTGAGATTTCAGT 1860
Qy 1861 GACTCAGAAATGGGGCATCACCATTGCTTGGAGTTTGAATTCAGGAAGAAATGTTT 1920
Db 1861 GACTCAGAAATGGGGCATCACCATTGCTTGGAGTTTGAATTCAGGAAGAAATGTTT 1920
Qy 1921 TGGAAATCTGATGCTCTTTTACCACACAGAGACTTCTCCATCAGGTCCCTAGCGACCGCTTG 1980
Db 1921 TGGAAATCTGATGCTCTTTTACCACACAGAGACTTCTCCATCAGGTCCCTAGCGACCGCTTG 1980

RESULT 3
ADE95904

ID ADE95904 standard; DNA; 2364 BP.

XX AC ADE95904;

XX DT 12-FEB-2004 (first entry)

XX Human STAT5B gene coding sequence.

XX DE cancer diagnosis; cancer treatment; carcinoma; cytostatic; gene therapy;
XX KW lymphoma; breast cancer; prostate cancer; leukaemia; ds; human; STAT5B.

XX OS Homo sapiens.

XX PN WO2003039484-A2.

XX PD 15-MAY-2003.

XX PF 08-NOV-2002; 2002WO-US036071.

XX PR 08-NOV-2001; 2001US-00052482.

XX PA (SAGR-) SAGRES DISCOVERY.

XX PI Morris DW, Engelhard EK;

XX PS WPI; 2003-441462/41.

XX DR New carcinoma associated nucleic acids and proteins, useful for screening
XX PT drug candidates, or for diagnosing and treating carcinomas, e.g.
XX PT lymphoma, breast cancer, prostate cancer or leukemia.

XX PS Claim 1; SEQ ID NO 162; 793pp; English.

XX CC This invention relates to novel recombinant nucleic acids for use in
XX CC diagnosis and treatment of cancer, especially carcinomas, as well as the
XX CC use of compositions in screening methods. The compositions of the
XX CC invention may have cytostatic activity whilst the disclosed sequences may
XX CC be useful for gene therapy. The carcinoma associated nucleic acids and
XX CC proteins are useful for diagnosing and treating carcinomas, for example
XX CC lymphoma, breast cancer, prostate cancer or leukaemia, or for screening
XX CC drug candidates or bioactive agents capable of binding to, or modulating

CC the activity of, a carcinoma associated protein. The present sequence is
CC the coding DNA sequence of the human STAT5B gene which is a carcinoma
CC associated gene of the invention.

XX
SQ Sequence 2364 BP; 594 A; 636 C; 666 G; 468 T; 0 U; 0 Other;
Query Match 100.0%; Score 2364; DB 10; Length 2364;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2364; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 ATGGCTGTGGATACAGCTCAGAGCTCAAGAGAGCCCTTCATCATGCAAGCG 60
Db 1 ATGGCTGTGGATACAGCTCAGAGCTCAAGAGAGCCCTTCATCATGCAAGCG 60
Qy 61 TTATATGCCAGCATTTTCCCATTCAGGTGGGCAATTTATCCAGTGATGAAGC 120
Db 61 TTATATGCCAGCATTTTCCCATTCAGGTGGGCAATTTATCCAGTGATGAAGC 120
Qy 121 CAAGCATGGGACTCAGTAGATCTTGAATATCCAGAGAAACATTTAAGGCCACCCAGCTC 180
Db 121 CAAGCATGGGACTCAGTAGATCTTGAATATCCAGAGAAACATTTAAGGCCACCCAGCTC 180
Qy 181 CTGAGGCGCTGGTGACAGAGCTGAGAGAGGACGACCGAGTGGGGAAAGATGG 240
Db 181 CTGAGGCGCTGGTGACAGAGCTGAGAGAGGACGACCGAGTGGGGAAAGATGG 240
Qy 241 TTTTACTGAAGATCAAGCTGGGCACTATGCCACAGCTCCAGAACACGTATGACCGC 300
Db 241 TTTTACTGAAGATCAAGCTGGGCACTATGCCACAGCTCCAGAACACGTATGACCGC 300
Qy 301 TGCCCATGAGAGCTGGTCCGCTGCATCCGCATATATTGTACAAATGAACAGAGTTGGTC 360
Db 301 TGCCCATGAGAGCTGGTCCGCTGCATCCGCATATATTGTACAAATGAACAGAGTTGGTC 360
Qy 361 CGAAGCAACAATGTTAGCTCTCCAGCTGGAAGCTTGTGATGCAATGTCACAGAA 420
Db 361 CGAAGCAACAATGTTAGCTCTCCAGCTGGAAGCTTGTGATGCAATGTCACAGAA 420
Qy 421 CACCTCCAGATCAACAGACCTTTGAGAGCTGGAGCTGGTCAAGAGACACAGAGAT 480
Db 421 CACCTCCAGATCAACAGACCTTTGAGAGCTGGAGCTGGTCAAGAGACACAGAGAT 480
Qy 481 GAGTTAAAAAGCTGCAGCAGACTCAGAGTACTTTCATCATCCAGTACAGAGAGCTG 540
Db 481 GAGTTAAAAAGCTGCAGCAGACTCAGAGTACTTTCATCATCCAGTACAGAGAGCTG 540
Qy 541 AGGATCCAAAGCTCAGTTTGGCCGCTGGCCAGCTGAGCCGCCAGAGCGCTCAGCGCG 600
Db 541 AGGATCCAAAGCTCAGTTTGGCCGCTGGCCAGCTGAGCCGCCAGAGCGCTCAGCGCG 600
Qy 601 GAGAGCGCCCTCCAGCAGAGAGCTGTCTTGGAGGCTGGTTCAGCGTGAAGCAG 660
Db 601 GAGAGCGCCCTCCAGCAGAGAGCTGTCTTGGAGGCTGGTTCAGCGTGAAGCAG 660
Qy 661 ACCTGACAGAGTACCGGTGGAGCTGCCAGAGACACAGAGACCTTCAGCTGCTG 720
Db 661 ACCTGACAGAGTACCGGTGGAGCTGCCAGAGACACAGAGACCTTCAGCTGCTG 720
Qy 721 CGAAGCAGCAGACCATCATCTGGATGACAGAGCTGATCCAGTGAAGCGCGCAGCAG 780
Db 721 CGAAGCAGCAGACCATCATCTGGATGACAGAGCTGATCCAGTGAAGCGCGCAGCAG 780
Qy 781 CTGCGCGGAAACGGCGGCGCCCGAGGCGAGCTGTGAGAGCTGTACAGTCTGTGTGAG 840
Db 781 CTGCGCGGAAACGGCGGCGCCCGAGGCGAGCTGTGAGAGCTGTACAGTCTGTGTGAG 840
Qy 841 AAGTTGGCGAGATCATCTGCAGAACCGGAGAGATCCGAGGCTGAGCACTCTGC 900
Db 841 AAGTTGGCGAGATCATCTGCAGAACCGGAGAGATCCGAGGCTGAGCACTCTGC 900
Qy 901 CAGCAGCTGCCCATCCCCGGCCAGTGGAGAGATGCTGGCGGAGGTCAACGCCACCATC 960
Db 901 CAGCAGCTGCCCATCCCCGGCCAGTGGAGAGATGCTGGCGGAGGTCAACGCCACCATC 960

Qy 961 ACGGACATATCTCAGCCCTGGTGACAGCAGCTTTCATCATTTGAGAAAGCAGCTCCTCAG 1020
Db 961 ACGGACATATCTCAGCCCTGGTGACAGCAGCTTTCATCATTTGAGAAAGCAGCTCCTCAG 1020
Qy 1021 GTCTGAAGACCCAGACCAAGTTTTCAGCCACTGTGGCCTGTGGTGGGGGGAAGCTG 1080
Db 1021 GTCTGAAGACCCAGACCAAGTTTTCAGCCACTGTGGCCTGTGGTGGGGGGAAGCTG 1080
Qy 1081 AACGTGCACATGACACCCCGGCAATGATTACAGTGGCGAGATCTTCAACCAACTGC 1140
Db 1081 AACGTGCACATGACACCCCGGCAATGATTACAGTGGCGAGATCTTCAACCAACTGC 1140
Qy 1141 TCTCTGTCTCAAGAACGAGAACACCCCGCAATGATTACAGTGGCGAGATCTTCAACCAACTGC 1200
Db 1141 TCTCTGTCTCAAGAACGAGAACACCCCGCAATGATTACAGTGGCGAGATCTTCAACCAACTGC 1200
Qy 1201 TGCGTCAATGAGTAGTACCAAGCCACAGGCACTTATAGTGGCCACTTCAGGAAATATGTC 1260
Db 1201 TGCGTCAATGAGTAGTACCAAGCCACAGGCACTTATAGTGGCCACTTCAGGAAATATGTC 1260
Qy 1261 CTGAAACGAATTAAGAGTCAAGCCGTGGGGCAGAGTCGGTGACAGAGAAATTT 1320
Db 1261 CTGAAACGAATTAAGAGTCAAGCCGTGGGGCAGAGTCGGTGACAGAGAAATTT 1320
Qy 1321 ACAATCTCTGTTGAATCCCAAGTTCAGTTCAGTGGTGAATGAGCTGGTTTTTCAAGTCAAG 1380
Db 1321 ACAATCTCTGTTGAATCCCAAGTTCAGTTCAGTGGTGAATGAGCTGGTTTTTCAAGTCAAG 1380
Qy 1381 ACCGTCTCCCTGCGCAGTGGTGTATCTTCATGGCAGCCAGGACAAACAATGCCAGCGCC 1440
Db 1381 ACCGTCTCCCTGCGCAGTGGTGTATCTTCATGGCAGCCAGGACAAACAATGCCAGCGCC 1440
Qy 1441 ACTGTTCTCTGGGCAATGCTTTTGCAGAGCTGGCAGGCTGGCAATTTGCCGTGCTGAC 1500
Db 1441 ACTGTTCTCTGGGCAATGCTTTTGCAGAGCTGGCAGGCTGGCAATTTGCCGTGCTGAC 1500
Qy 1501 AAAGTGTCTGGCCACAGCTGTGTGAGCGCTCAACATGAATTTCAAGGCCGAGTGCAG 1560
Db 1501 AAAGTGTCTGGCCACAGCTGTGTGAGCGCTCAACATGAATTTCAAGGCCGAGTGCAG 1560
Qy 1561 AGCAACCGGGCTTGACCAAGGAGAACCTCGTGTCTTGGCGCAGAACTGTTCACAAAC 1620
Db 1561 AGCAACCGGGCTTGACCAAGGAGAACCTCGTGTCTTGGCGCAGAACTGTTCACAAAC 1620
Qy 1621 AGCAGCAGCCCTGAGGAGTACAGTGGCCTGTCTGTCTCTGGTCCAGTTCACAGG 1680
Db 1621 AGCAGCAGCCCTGAGGAGTACAGTGGCCTGTCTGTCTCTGGTCCAGTTCACAGG 1680
Qy 1681 GAGAAATTTACAGGACGGAATTTACACTTTCTGGCAATGGTTTGACGGTGTGATGGAAGTG 1740
Db 1681 GAGAAATTTACAGGACGGAATTTACACTTTCTGGCAATGGTTTGACGGTGTGATGGAAGTG 1740
Qy 1741 TTAATAAAACATCTCAAGCCCTCATTGGAAATGATGGGCAATTTTGGGGTTTGTAAACAAG 1800
Db 1741 TTAATAAAACATCTCAAGCCCTCATTGGAAATGATGGGCAATTTTGGGGTTTGTAAACAAG 1800
Qy 1801 CAACAGGCCCATGACCTTACCTGATTAACAGCCAGATGGGACCTTCTCTCAGATTCAAT 1860
Db 1801 CAACAGGCCCATGACCTTACCTGATTAACAGCCAGATGGGACCTTCTCTCAGATTCAAT 1860
Qy 1861 GACTCAGAAATTTGGCGGCAATCCATTTGCTTGGAGTTTGAATCTCAGGAAGAAATGTTT 1920
Db 1861 GACTCAGAAATTTGGCGGCAATCCATTTGCTTGGAGTTTGAATCTCAGGAAGAAATGTTT 1920
Qy 1921 TGGAAATCTGATGCTTTTACCAACAGAGACTTCTCCATCAGGTCCCTAGCCGACCGCTTG 1980
Db 1921 TGGAAATCTGATGCTTTTACCAACAGAGACTTCTCCATCAGGTCCCTAGCCGACCGCTTG 1980
Qy 1981 GGAGACTTGAATTAACCTTATCTACGTGTTTCTGATCGGCCAAAGATGAAGTATATCTCC 2040
Db 1981 GGAGACTTGAATTAACCTTATCTACGTGTTTCTGATCGGCCAAAGATGAAGTATATCTCC 2040

QY 2041 AATACATACACACAGTTCCCTGGAGTCTGCTACTGCTAAAGCTGTGATGGATACGTG 2100
Db |||||||
QY 2041 AATACATACACACAGTTCCCTGGAGTCTGCTACTGCTAAAGCTGTGATGGATACGTG 2100
Db |||||||
QY 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGATCTGCAGATGCCGGGGC 2160
Db |||||||
QY 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGATCTGCAGATGCCGGGGC 2160
Db |||||||
QY 2161 GGCAGCGCAGTACATGAGACAGGCCCTCCAGCTGTGTGCCAGGTCACATAT 2220
Db |||||||
QY 2161 GGCAGCGCCAGTACATGAGACAGGCCCTCCAGCTGTGTGCCAGGTCACATAT 2220
Db |||||||
QY 2221 AACATGTACCCACAGAACCTGACTCAGTCTTGACACCGATGGGACTTCGATCTCGAG 2280
Db |||||||
QY 2221 AACATGTACCCACAGAACCTGACTCAGTCTTGACACCGATGGGACTTCGATCTCGAG 2280
Db |||||||
QY 2281 GACACAAATGGACGTAGCGCGCGTGTGGAGGAGTCTCTGGCGCCGCAATGGACAGTCAG 2340
Db |||||||
QY 2281 GACACAAATGGACGTAGCGCGCGTGTGGAGGAGTCTCTGGCGCGCAATGGACAGTCAG 2340
Db |||||||
QY 2341 TGGATCCCGCAGCAGCAATCGTGA 2364
Db |||||||
QY 2341 TGGATCCCGCAGCAGCAATCGTGA 2364
Db |||||||

RESULT 4

ABZ35457
ID ABZ35457 standard; cdna; 2782 BP.
AC ABZ35457;
XX
DT 05-FEB-2003 (first entry)
XX
DE Human gene expression profile polynucleotide SEQ ID NO 568.
XX
KW Human; artery; endothelium; umbilical; vein; aorta; pulmonary artery;
KW bronchial epithelium; prostate; muscle; lung fibroblast; osteoblast;
KW tumour; microarray; genome mapping; antibiotic; antiviral; antifungal;
KW gene expression; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200274979-A2.
XX
PD 26-SEP-2002.
XX
PF 20-MAR-2002; 2002WO-US008456.
XX
PR 20-MAR-2001; 2001US-0276947P.
XX
PA (ORTH) ORTHO CLINICAL DIAGNOSTICS INC.
XX
PI Wan J, Wang Y;
XX
PI WPI; 2002-740862/80.
XX
PT New gene expression profile generated from primary, endothelial,
PT epithelial, and muscle cell types, useful for identifying disease
PT pathologies involving alterations of gene expression, e.g. cancer.
XX
PS Disclosure; Page 704-705; 850pp; English.
XX
CC The invention relates to a gene expression profile comprising one or more
CC genes (ABZ34889-ABZ35692) and generated from a cell type. The cell type
CC is a coronary artery endothelium, umbilical artery or vein endothelium,
CC aortic endothelium, dermal microvascular endothelium, pulmonary artery
CC endothelium, myometrium microvascular endothelium, keratinocyte
CC epithelium, bronchial epithelium, mammary epithelium, prostate
CC epithelium, renal cortical epithelium, renal proximal tubule epithelium,
CC small airway epithelium, renal epithelium, umbilical artery smooth
CC muscle, neonatal dermal fibroblast, pulmonary artery smooth muscle,
CC dermal fibroblast, neural progenitor cells, skeletal muscle, astrocytes,
CC aortic smooth muscle, mesangial cells, coronary artery smooth muscle,

CC bronchial smooth muscle, uterine smooth muscle, lung fibroblast,
CC osteoblasts or prostate stromal cell. The gene expression profile is used
CC for determining the level of RNA expression for a sample, determining the
CC phenotype of a cell and distinguishing cell types. The gene or a protein
CC expression profile is useful in identifying disease pathologies involving
CC alterations of gene expression. The assessment of expression profiles may
CC provide meaningful information with respect to tumour type and stage,
CC treatment methods, and prognosis. The gene or protein expression profile
CC may also be used for creating microarrays. The microarray is useful for
CC genetic and physical mapping of genomes, DNA sequencing, genetic or
CC medical diagnosis, genotyping of organisms, confirming cell or tissue
CC identifications and in identifying promising antibiotics, antiviral or
XX antifungal agents
SQ Sequence 2782 BP; 669 A; 739 C; 801 G; 573 T; 0 U; 0 Other;
Query Match 100.0%; Score 2364; DB 6; Length 2782;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2364; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCTGTGTGGATACAAAGCTCAGAGCTCCAGGAGAGAGCCCTTATCATAGATGCAAGCG 60
Db |||||||
QY 61 TTATATGGCCAGCATTTTCCATTGAGTGGCGCATTTATTTATCCAGTGGATTGAAGC 120
Db |||||||
QY 207 TTATATGGCCAGCATTTTCCATTGAGTGGCGCATTTATTTATCCAGTGGATTGAAGC 266
Db |||||||
QY 121 CAAGCATGGGACTCAGTAGATCTTGTATAATCCAGGAGAACATTAAGGCCACCCAGCTC 180
Db |||||||
QY 267 CAAGCATGGGACTCAGTAGATCTTGTATAATCCAGGAGAACATTAAGGCCACCCAGCTC 326
Db |||||||
QY 181 CTGGAGGCCCTGTGTCAGGAGCTGCAGAAAGGAGAGACACAGGTGGGGAAAGTGG 240
Db |||||||
QY 327 CTGGAGGCCCTGTGTCAGGAGCTGCAGAAAGGAGAGACACAGGTGGGGAAAGTGG 386
Db |||||||
QY 241 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACAGCTCCAGAACACGTATGACCGC 300
Db |||||||
QY 387 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACAGCTCCAGAACACGTATGACCGC 446
Db |||||||
QY 301 TGCCCCATGGAGCTGGTCCGCTGCATCCGCCATATATTGTACAATGAACAGAGTTGGTC 360
Db |||||||
QY 447 TGCCCCATGGAGCTGGTCCGCTGCATCCGCCATATATTGTACAATGAACAGAGTTGGTC 506
Db |||||||
QY 361 CGAGAGCCAAACAATGTAGTCTCCAGCTGGAGCCCTTCTGTATGCCATGTCCAGAAA 420
Db |||||||
QY 507 CGAGAGCCAAACAATGTAGTCTCCAGCTGGAGCCCTTCTGTATGCCATGTCCAGAAA 566
Db |||||||
QY 421 CACCTCCAGATCAACACAGACGTTTGGAGAGCTGCGACTGTCAGCGAGGACACAGAGAT 480
Db |||||||
QY 567 CACCTCCAGATCAACACAGACGTTTGGAGAGCTGCGACTGTCAGCGAGGACACAGAGAT 626
Db |||||||
QY 481 GAGTTAAAAAGCTGCAGCAGACTCAGGAGTACTTTCATCATCCAGTACCAGGAGCGCTG 540
Db |||||||
QY 627 GAGTTAAAAAGCTGCAGCAGACTCAGGAGTACTTTCATCATCCAGTACCAGGAGCGCTG 686
Db |||||||
QY 541 AGGATCCAAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCCGCCAGGAGCGTCTGAGCGG 600
Db |||||||
QY 687 AGGATCCAAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCCGCCAGGAGCGTCTGAGCGG 746
Db |||||||
QY 601 GAGACGCCCTCCAGCAGAGAGGTTGTCCTGAGGCCCTGGTTGACGCGTGAGGCACAG 660
Db |||||||
QY 747 GAGACGCCCTCCAGCAGAGAGGTTGTCCTGAGGCCCTGGTTGACGCGTGAGGCACAG 806
Db |||||||
QY 661 ACATGTGAGCAGTACCGCTGGAGCTGCCCGAGAGACACAGAACACCTTCAGCTGCTG 720
Db |||||||
QY 807 ACATGTGAGCAGTACCGCTGGAGCTGCCCGAGAGACACAGAACACCTTCAGCTGCTG 866
Db |||||||
QY 721 CGGAGCAGCAGACCATCATCTCGATGACAGCTGATCCAGTGGAGCCGCGGACAG 780
Db |||||||
QY 867 CGGAGCAGCAGACCATCATCTCTGGATGACAGCTGATCCAGTGGAGCCGCGGACAG 926
Db |||||||
QY 781 CTGGCCGGGAAACGGCGGGCCCCCGGAGGCGAGCTGGACGCTGCTACAGTCTCTGTGTGAG 840
Db |||||||

Db 927 CTGGCCGGGAAACGGCGGGCCCCCGAGGCGAGCCCTGGACGTGCTACAGTCCCTGGTGGAG 986
Qy 841 AAGTTGGCGGAGATCATCTGCAGAAACCGGAGAGATCCGACGGCTTGAGCACTCTGC 900
Db 987 AAGTTGGCGGAGATCATCTGCAGAAACCGGAGAGATCCGACGGCTTGAGCACTCTGC 1046
Qy 901 CAGCAGCTGCCATCCCGGCCCGCCAGTGGAGGAGATGCTGGCGAGGTCAACGCCACCATC 960
Db 1047 CAGCAGCTGCCATCCCGGCCCGCCAGTGGAGGAGATGCTGGCGAGGTCAACGCCACCATC 1106
Qy 961 ACGGACATTATCTCAGCCCTGGTACACGACAGTTCATCTATGAGAGCAGCCCTCTCAG 1020
Db 1107 ACGGACATTATCTCAGCCCTGGTACACGACAGTTCATCTATGAGAGCAGCCCTCTCAG 1166
Qy 1021 GTCCTGAAGACCCAGACCAAGTTTGACGCACTGTGGCCCTGCTGGTGGCGGGAAGCTG 1080
Db 1167 GTCCTGAAGACCCAGACCAAGTTTGACGCACTGTGGCCCTGCTGGTGGCGGGAAGCTG 1226
Qy 1081 AACGTGACATGAACCCCCCGCCAGGTGAAGGCCACCATCATCAGTGAGCAGCGGCCAAG 1140
Db 1227 AACGTGACATGAACCCCCCGCCAGGTGAAGGCCACCATCATCAGTGAGCAGCGGCCAAG 1286
Qy 1141 TCTCTGCTCAAGAACGAGAAACCCCGCAATGATTACAGTGGCGAGATCTTGAAACAATGC 1200
Db 1287 TCTCTGCTCAAGAACGAGAAACCCCGCAATGATTACAGTGGCGAGATCTTGAAACAATGC 1346
Qy 1201 TGGCTCATGGAGTACCAACAGGACACAGGACCCCTTAGTGCCCACTTCAGGAATATGCC 1260
Db 1347 TGGCTCATGGAGTACCAACAGGACACAGGACCCCTTAGTGCCCACTTCAGGAATATGCC 1406
Qy 1261 CTGAAACGAAATTAAGAGGTGACAGCGTCTGGGGCAGAGTCCGTGACAGAGAGAAAAATT 1320
Db 1407 CTGAAACGAAATTAAGAGGTGACAGCGTCTGGGGCAGAGTCCGTGACAGAGAGAAAAATT 1466
Qy 1321 ACAATCTCTGTTGAATCCAGTTCAGTGTGGTGGAAATGAGCTGGTTTTCAAGTCAAG 1380
Db 1467 ACAATCTCTGTTGAATCCAGTTCAGTGTGGTGGAAATGAGCTGGTTTTCAAGTCAAG 1526
Qy 1381 ACCGTGCTCCCGCAGTGGTGGTGTATGTTTCATGGCAGCAGGACACAATGCGACGGCC 1440
Db 1527 ACCGTGCTCCCGCAGTGGTGGTGTATGTTTCATGGCAGCAGGACACAATGCGACGGCC 1586
Qy 1441 ACTGTTCTCTGGGACAAATGTTTTGCAGAGCTTGGCAGGTCGCAATTTGCCGTGCTGAC 1500
Db 1587 ACTGTTCTCTGGGACAAATGTTTTGCAGAGCTTGGCAGGTCGCAATTTGCCGTGCTGAC 1646
Qy 1501 AAGTGTCTGTGGCCACAGCTGTGTGAGGCGCTCAACATGAAATTCAGGGCCGAAAGTGCAG 1560
Db 1647 AAGTGTCTGTGGCCACAGCTGTGTGAGGCGCTCAACATGAAATTCAGGGCCGAAAGTGCAG 1706
Qy 1561 AGCAACCGGGGCTTGACCAAGAGAACCTCGTGTCTGGTCCCGCAGTTCACACAGG 1620
Db 1707 AGCAACCGGGGCTTGACCAAGAGAACCTCGTGTCTGGTCCCGCAGTTCACACAGG 1766
Qy 1621 AGCAGCAGCCACTGGAGAGCTACAGTGGCGCTGTGTGTCTGGTCCCGCAGTTCACACAGG 1680
Db 1767 AGCAGCAGCCACTGGAGAGCTACAGTGGCGCTGTGTGTCTGGTCCCGCAGTTCACACAGG 1826
Qy 1681 GAGAATTTACAGGACGGAATTTACACTTTCTGGCAATGTTTGACGGTGTGATGGAAGTG 1740
Db 1827 GAGAATTTACAGGACGGAATTTACACTTTCTGGCAATGTTTGACGGTGTGATGGAAGTG 1886
Qy 1741 TTAATAAACATCTCAAGCCCTCATTTGGAATGATGGGCCATTTGGGGTTTGTAAACAG 1800
Db 1887 TTAATAAACATCTCAAGCCCTCATTTGGAATGATGGGCCATTTGGGGTTTGTAAACAG 1946
Qy 1801 CAACAGGCCCATGACCTACTGATTAAACAGCAGATGGACCTTCTCTCAGATTTCAGT 1860
Db 1947 CAACAGGCCCATGACCTACTGATTAAACAGCAGATGGACCTTCTCTCAGATTTCAGT 2006
Qy 1861 GACTCAGAAATTTGGCGGCATCACCATTGCTTGGAGTTTGTATCTCAGGAAGAATGTTT 1920

Db 2007 GACTCAGAAATTTGGCGGCATCACCAATTTGCTTGGAAAGTTTGATTTCTCAGGAAGAATGTTT 2066
Qy 1921 TGGAAATCTGATGCTTTTACCCACAGAGACTTCTCCATCAGGTCCCTAGCCGACCGCTTG 1980
Db 2067 TGGAAATCTGATGCTTTTACCCACAGAGACTTCTCCATCAGGTCCCTAGCCGACCGCTTG 2126
Qy 1981 GGAGACTTTGAATTTACCTTATCTAGCTGTTTCTGATCGGCCAAAGATGAAGTATACTCC 2040
Db 2127 GGAGACTTTGAATTTACCTTATCTAGCTGTTTCTGATCGGCCAAAGATGAAGTATACTCC 2186
Qy 2041 AATACTACACACAGTTCCCTGCGAGTCTGCTACTCTAAAGCTGTTGATGGATACGTG 2100
Db 2187 AATACTACACACAGTTCCCTGCGAGTCTGCTACTCTAAAGCTGTTGATGGATACGTG 2246
Qy 2101 AAGCCACAGATCAAGCAAGTGGTCCCTCAGTTTGTGAACGATCTGCAGATGCCGGGGGC 2160
Db 2247 AAGCCACAGATCAAGCAAGTGGTCCCTCAGTTTGTGAACGATCTGCAGATGCCGGGGGC 2306
Qy 2161 GGAGCGCCACGTCATACATGGACCCCTTCCAGCTGTGTCTCCAGGCTCACTAT 2220
Db 2307 GGAGCGCCACGTCATACATGGACCCCTTCCAGCTGTGTCTCCAGGCTCACTAT 2366
Qy 2221 AACATGTACCCACAGAACCCCTGACTCCTTGACACCGATGGGACTTCGATCTGGAG 2280
Db 2367 AACATGTACCCACAGAACCCCTGACTCCTTGACACCGATGGGACTTCGATCTGGAG 2426
Qy 2281 GACAAATGGACGTAGCGCGCGTGTGGAGAGCTCTGGGCCGCGCAATGGACAGTCCAG 2340
Db 2427 GACAAATGGACGTAGCGCGCGTGTGGAGAGCTCTGGGCCGCGCAATGGACAGTCCAG 2486
Qy 2341 TGGATCCCGCAGCACAATCGTGA 2364
Db 2487 TGGATCCCGCAGCACAATCGTGA 2510

RESULT 5
ABK72299
ID ABK72299 standard; DNA; 2782 BP.
XX
AC ABK72299;
XX
DT 30-JUL-2002 (first entry)
XX
DE Lymphoma associated polynucleotide #158.
XX
KW Lymphoma associated protein; Pik1r1; GNAS; XI (alpha_s); NESP55; JAK1;
KW Neurogranin; Nfr2; lymphoma; DNA vaccine; cytotoxic T-cell; animal model;
KW leukaemia; ds.
XX
OS Homo sapiens.
XX
PN WO200224867-A2.
XX
PD 28-MAR-2002.
XX
PF 24-SEP-2001; 2001WO-US029798.
XX
PR 22-SEP-2000; 2000US-00668644.
PR 13-JUL-2001; 2001US-00905390.
PR 13-JUL-2001; 2001US-00905491.
PA (UYAA-) UNIV AARHUS.
XX
PI Pedersen FS, Sorensen AB, Hernandez JM, Nielsen AA, Moving HO;
XX
DR WPI; 2002-416279/44.
XX
PT Novel recombinant lymphoma associated protein (LAP) such as pik3r1, GNAS,
PT JAK1, Neurogranin, Nfr2 proteins, useful for identifying inhibitors of
PT LAP activity that are used for treating lymphoma.
XX
PS Disclosure; Page 113-114; 160pp; English.
XX

The invention describes a recombinant protein (I) from a lymphoma associated protein (LAP) sequence of Pik3r1, GNAS (including XI (alpha s), and NESP55), JAK1, Neurogranin or Mfr2 proteins. (I) is useful for screening for a bioactive agent capable of binding to an LA protein (LAP) which is encoded by a polynucleotide (II) and (II) is useful for evaluating the effect of a candidate lymphoma drug in a patient. (I) and (II) is also useful for diagnosing lymphoma involving determining the expression of one or more (II), or (I) encoded by (II) in a first tissue type of a first individual and comparing the expression of the gene(s) from a second normal tissue type from the first individual or a second unaffected individual, where a difference in the expression indicates that the first individual has lymphoma. (II) is useful in the diagnosis and treatment of lymphoma and leukaemia. A host cell comprising (II) is useful for screening drug candidates which involves providing the host cell that expresses LA gene, adding a drug candidate to the cell, and determining the effect of the drug candidate on the expression of the LA gene. LA genes are also administered as DNA vaccines, such that expression of the polypeptide encoded by the DNA vaccine, cytotoxic T-cells and antibodies are induced which recognise and destroy or eliminate cells expressing LA proteins. The genes are also for generating animal models of lymphoma. This sequence represents a lymphoma associated polynucleotide described in the invention

SQ Sequence 2782 BP; 669 A; 739 C; 801 G; 573 T; 0 U; 0 Other;

Query Match	100.0%	Score 2364;	DB 6;	Length 2782;
Best Local Similarity	100.0%	Pred. No. 0;		
Matches 2364;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;

1	QY	ATGCTGTGTGGATACAAAGCTCAGCAGCTCCAAAGAGAGCCCTTCATCAGATGCAAGCG	60
147	Db		206
	QY	ATGCTGTGTGGATACAAAGCTCAGCAGCTCCAAAGAGAGCCCTTCATCAGATGCAAGCG	
61	QY	TTATATGCCCAGCAGATTTTCCCATTTGAGGTGCGGCATTTATTTATCCAGTGGATTGAAAGC	120
	Db		
207	Db	TTATATGCCCAGCAGATTTTCCCATTTGAGGTGCGGCATTTATTTATCCAGTGGATTGAAAGC	266
	QY		
121	QY	CAAGCATGGGACTCAGTAGATCTTTGATAATCCACAGGAGAAACATTTAAGGCCACCCAGCTC	180
	Db	CAAGCATGGGACTCAGTAGATCTTTGATAATCCACAGGAGAAACATTTAAGGCCACCCAGCTC	
267	QY	CTGAGGGCCCTGGTGCAGGAGCTGCAGAAAGACGACAGCACCAGTTGGGGGAGATGGG	240
	Db	CTGAGGGCCCTGGTGCAGGAGCTGCAGAAAGACGACAGCACCAGTTGGGGGAGATGGG	
327	QY	TTTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAAACAGCTATGACCGC	300
	Db	TTTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAAACAGCTATGACCGC	
387	QY	TGCCCCATGAGCTGCTCGCTGCAATTCGCCCATATATTGTATCAATGAACAGAGTTGTCT	360
	Db	TGCCCCATGAGCTGCTCGCTGCAATTCGCCCATATATTGTATCAATGAACAGAGTTGTCT	
447	QY	CGAAGGCCAACATGTTAGCTCTCCAGCTGGAAGCCCTTGCTGATGCCATGTCCTCCAGAAA	420
	Db	CGAAGGCCAACATGTTAGCTCTCCAGCTGGAAGCCCTTGCTGATGCCATGTCCTCCAGAAA	
421	QY	CACCTCCAGATCAACACAGACGTTTGGAGAGCTGCGACTGGTCAACAGGACACAGAGAT	480
	Db	CACCTCCAGATCAACACAGACGTTTGGAGAGCTGCGACTGGTCAACAGGACACAGAGAT	
481	QY	GAGTTAAAAAGCTGCAGCAGACCTCAGGAGTACTTTCATATCCAGTACACAGAGAGCCTG	540
	Db	GAGTTAAAAAGCTGCAGCAGACCTCAGGAGTACTTTCATATCCAGTACACAGAGAGCCTG	
541	QY	AGGATCCAAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCCCCAGGAGCGCTCTGAGCCGG	600
	Db	AGGATCCAAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCCCCAGGAGCGCTCTGAGCCGG	
601	QY	GAGACGGCCCTCCAGCAGAAAGCAGGTGTCTCTGGAGGCGCTGGTTGACGCGTAGGCAAG	660
	Db	GAGACGGCCCTCCAGCAGAAAGCAGGTGTCTCTGGAGGCGCTGGTTGACGCGTAGGCAAG	
747	QY	ATGCTGTGTGGATACAAAGCTCAGCAGCTCCAAAGAGAGCCCTTCATCAGATGCAAGCG	806
	Db	ATGCTGTGTGGATACAAAGCTCAGCAGCTCCAAAGAGAGCCCTTCATCAGATGCAAGCG	

Db 1887 TTAATAAACATCTCAAGCCTCATTTGGAATGATGGGCCATTTTGGGTTTGTAAACAAG 1946
Qy 1801 CAACAGGCCATGACCTACTACTATTAACAAGCCAGATGGACCTTCTCTCCTGAGATTCAAT 1860
Db 1947 CAACAGGCCATGACCTACTACTATTAACAAGCCAGATGGACCTTCTCTCCTGAGATTCAAT 2006
Qy 1861 GACTCAGAAATGGCGGCATCACCATTGCTTTGGAAATTTGATTTCTCAGAAAGAAATGTTT 1920
Db 2007 GACTCAGAAATGGCGGCATCACCATTGCTTTGGAAATTTGATTTCTCAGAAAGAAATGTTT 2066
Qy 1921 TGGAAATCTGATGCTTTTACCACAGACACTTCTCCATCAGGTCCCTTAGCCGACCGCTTG 1980
Db 2067 TGGAAATCTGATGCTTTTACCACAGACACTTCTCCATCAGGTCCCTTAGCCGACCGCTTG 2126
Qy 1981 GGAGACTTGAATTAACCTTATCTAGCTGTTTCTGATCGGCCAAAGATGAAGTATCTCC 2040
Db 2127 GGAGACTTGAATTAACCTTATCTAGCTGTTTCTGATCGGCCAAAGATGAAGTATCTCC 2186
Qy 2041 AAATACTACACACAGTTCCCTGCGAGTCTGCTACTGCTAAAGCTTTGATGGATACGTG 2100
Db 2187 AAATACTACACACAGTTCCCTGCGAGTCTGCTACTGCTAAAGCTTTGATGGATACGTG 2246
Qy 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGATCTGCAAGATGCCGGGGC 2160
Db 2247 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGATCTGCAAGATGCCGGGGC 2306
Qy 2161 GGCAGCGCAGTATACATGAGCAGAGCCCTCCCTGAGTTTGTGAACGATCTGCAAGATGCCGGGGC 2220
Db 2307 GGCAGCGCAGTATACATGAGCAGAGCCCTCCCTGAGTTTGTGAACGATCTGCAAGATGCCGGGGC 2366
Qy 2221 AACATGTACCCACAGAACCTGACTCAGTCTTGAACCGATGGGACTTCTGATCTGGAG 2280
Db 2367 AACATGTACCCACAGAACCTGACTCAGTCTTGAACCGATGGGACTTCTGATCTGGAG 2426
Qy 2281 GACCAATGAGCAGTAGCGCGCGGTGTGGAGGAGTCTCTGGGCGCGCCCAATGGACAGTCAG 2340
Db 2427 GACCAATGAGCAGTAGCGCGCGGTGTGGAGGAGTCTCTGGGCGCGCCCAATGGACAGTCAG 2486
Qy 2341 TGGATCCCGCAGCGCAATCTGTGA 2364
Db 2487 TGGATCCCGCAGCGCAATCTGTGA 2510

RESULT 6
ID ADA02655 standard; cDNA; 2782 BP.
XX AC ADA02655;
XX DT 06-NOV-2003 (first entry)
XX DE Human STAT5B carcinoma associated cDNA, SEQ ID NO:1173.
XX KW Human; carcinoma associated; oncogene; carcinoma; cancer; breast;
XX KW prostate; lymphoma; leukaemia; cytostatic; gene therapy; drug screening;
XX KW gene; ss.
XX OS Homo sapiens.
XX PN WO2003057146-A2.
XX PD 17-JUL-2003.
XX PF 26-DEC-2002; 2002WO-US041414.
XX PR 26-DEC-2001; 2001US-00035832.
XX XX (SAGR-) SAGRES DISCOVERY.
XX PI Morris DW;
XX WPI; 2003-587068/55.

XX New recombinant nucleic acid encoding carcinoma associated protein,
PT useful for preparing compositions for treating carcinomas.
XX Claim 1; SEQ ID NO 1173; 245pp; English.
XX The invention relates to recombinant carcinoma associated (CA) nucleic
CC acid sequences from mouse and human (ADA01482-ADA03094), and to
CC recombinant carcinoma associated proteins (CAP) encoded by them. The
CC invention also encompasses expression vectors and host cells comprising a
CC CA nucleic acid, a polypeptide (especially an antibody) that specifically
CC binds to the protein, and a biochip comprising CA nucleic acid or
CC fragments thereof. The sequences of the invention were identified using
CC oncogenic retroviruses, which insert into the genome of the host organism
CC at random. Many of these do not carry transduced host oncogenes or
CC pathogenic trans-acting viral genes, meaning that cancer incidence is a
CC direct consequence of the effects of proviral integration into host
CC protooncogenes. The CA nucleic acid sequences can be used to diagnose
CC carcinoma (especially breast cancer, prostate cancer, lymphoma or
CC leukaemia) or a propensity to carcinoma by determination of the sequence
CC of a CA gene, or by determination of CA gene expression in particular
CC tissues. CA nucleic acids, proteins and antibodies are also useful as
CC therapeutic agents and in screening and evaluating drug candidates. The
CC present sequence represents a specifically claimed human CA nucleic acid
CC sequence of the invention. Note: The complete sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
XX Sequence 2782 BP; 669 A; 739 C; 801 G; 573 T; 0 U; 0 Other;
Query Match 100.0%; Score 2364; DB 9; Length 2782;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2364; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 ATGGCTGTGTGGATACAAAGCTCAGCAGCTCAAGGAGAGAGCCCTTCAATCAGATGCAAGCG 60
Db 147 ATGGCTGTGTGGATACAAAGCTCAGCAGCTCAAGGAGAGAGCCCTTCAATCAGATGCAAGCG 206
Qy 61 TTATATGCCAGCATTTTCCCATTTGAGTGGCGGATATTTATCCCACTGGATGCAAGCG 120
Db 207 TTATATGCCAGCATTTTCCCATTTGAGTGGCGGATATTTATCCCACTGGATGCAAGCG 266
Qy 121 CAAGCATGGGACTCAGTAGATCTTTGATAATCCAGAGAGAACATTTAAGGCCACCCAGCTC 180
Db 267 CAAGCATGGGACTCAGTAGATCTTTGATAATCCAGAGAGAACATTTAAGGCCACCCAGCTC 326
Qy 181 CTGGAGGCGCTGTGTGCGAGGAGCTGCAGAAAGGAGCAGCAGGCTGGGGAAGATGGG 240
Db 327 CTGGAGGCGCTGTGTGCGAGGAGCTGCAGAAAGGAGCAGCAGGCTGGGGAAGATGGG 386
Qy 241 TTTTACTGAAAGATCAAGCTGGGGGACATATGCCACACAGCTCCAGAACACGTATGACCGC 300
Db 387 TTTTACTGAAAGATCAAGCTGGGGGACATATGCCACACAGCTCCAGAACACGTATGACCGC 446
Qy 301 TGCCCCATGGAGCTGCTCCGCTGCATCGCCATATATTGTACAAATGAACAGAGTTTGGTC 360
Db 447 TGCCCCATGGAGCTGCTCCGCTGCATCGCCATATATTGTACAAATGAACAGAGTTTGGTC 506
Qy 361 CGAGAAGCCAAACAATGGTAGCTCTCCAGCTGGAAAGCCCTTGTGTGATGCCATGTCCAGAAA 420
Db 507 CGAGAAGCCAAACAATGGTAGCTCTCCAGCTGGAAAGCCCTTGTGTGATGCCATGTCCAGAAA 566
Qy 421 CACCTCCAGATCAACCCAGACGTTTTGAGAGCTGGCACTGGTTCAGCGAGGACACAGAGAAAT 480
Db 567 CACCTCCAGATCAACCCAGACGTTTTGAGAGCTGGCACTGGTTCAGCGAGGACACAGAGAAAT 626
Qy 481 GAGTTAAAAGCTGCAGCAGACTCAGGAGTACTTTCATCTCAGTACCGAGGAGCGCTG 540
Db 627 GAGTTAAAAGCTGCAGCAGACTCAGGAGTACTTTCATCTCAGTACCGAGGAGCGCTG 686
Qy 541 AGGATCCAAGCTCAGTTTGGCCCGCTGGCCCGAGCTGAGCCCCCAGGAGCGCTCTGAGCGCG 600

Db 687 AGGATCCAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCCCCAGGAGCGTCTGAGCCGG 746
Qy 601 GAGACGGCCCTCCAGCAGAAAGCAGGTGTCCTTGAGAGGCTTGTTGCGAGCTGAGGCAAG 660
Db 747 GAGACGGCCCTCCAGCAGAAAGCAGGTGTCCTTGAGAGGCTTGTTGCGAGCTGAGGCAAG 806
Qy 661 ACATGTCAGAGTACCGGTCGAGCTGCCAGAGCAGCAGAGAGACCTCGACCTGCTG 720
Db 807 ACATGTCAGAGTACCGGTCGAGCTGCCAGAGCAGCAGAGAGACCTCGACCTGCTG 866
Qy 721 CGGAAGCAGCAGACCATCATCTCGATGACAGCTGATCCAGTGGAAAGCGCGCAGCAG 780
Db 867 CGGAAGCAGCAGACCATCATCTCGATGACAGCTGATCCAGTGGAAAGCGCGCAGCAG 926
Qy 781 CTGCGCGGGAACGGGCGGCCCTCCGAGGCGAGCTTGACGTGCTGAGTCTGCTGTGAG 840
Db 927 CTGCGCGGGAACGGGCGGCCCTCCGAGGCGAGCTTGACGTGCTGAGTCTGCTGTGAG 986
Qy 841 AAGTTGGCGGAGATCATCTGCGAGAACCGGCGAGCAGATCCGACGGCTGAGCACCCTGCG 900
Db 987 AAGTTGGCGGAGATCATCTGCGAGAACCGGCGAGCAGATCCGACGGCTGAGCACCCTGCG 1046
Qy 901 CAGCAGCTGCCATCCCGGCCCTGAGGAGAGATGCTGGCGGAGGTCAACGCCACCATC 960
Db 1047 CAGCAGCTGCCATCCCGGCCCTGAGGAGAGATGCTGGCGGAGGTCAACGCCACCATC 1106
Qy 961 ACGGACATTAATCTCAGGCCCTGGTGACACGACGTTTCATTTAGAGAGAGCCTCCTCAG 1020
Db 1107 ACGGACATTAATCTCAGGCCCTGGTGACACGACGTTTCATTTAGAGAGAGCCTCCTCAG 1166
Qy 1021 GTCTGTGAGACCCAGACCAAGTTTGACGCCACTGTGGCCCTGCTGGGGGGAAGCTG 1080
Db 1167 GTCTGTGAGACCCAGACCAAGTTTGACGCCACTGTGGCCCTGCTGGGGGGAAGCTG 1226
Qy 1081 AACGTGCACATGAACCCCCCAGGTGAAGGCCACCATCATCATGAGCAGCAGGCCCAAG 1140
Db 1227 AACGTGCACATGAACCCCCCAGGTGAAGGCCACCATCATCATGAGCAGCAGGCCCAAG 1286
Qy 1141 TCTCTGTCAAGAACGAGAACACCCGCAATGATTTACAGTGGCGAGATCTTGAAACAATGTC 1200
Db 1287 TCTCTGTCAAGAACGAGAACACCCGCAATGATTTACAGTGGCGAGATCTTGAAACAATGTC 1346
Qy 1201 TGGTGTATGAGTAGTACCAAGCAGCAGCACCCTTAGTGCCCACTTCAGGAATATGTCC 1260
Db 1347 TGGTGTATGAGTAGTACCAAGCAGCAGCACCCTTAGTGCCCACTTCAGGAATATGTCC 1406
Qy 1261 CTGAAACGAAATTAAGAGGTACAGCCGTGCTGGGGCAGAGTCGTTGACAGAGAAAAATTT 1320
Db 1407 CTGAAACGAAATTAAGAGGTACAGCCGTGCTGGGGCAGAGTCGTTGACAGAGAAAAATTT 1466
Qy 1321 ACAATCTCTGTTGAATCCAGTTTCAAGTTGGTGGAAATGAGCTGGTTTTTCAAGTCAAG 1380
Db 1467 ACAATCTCTGTTGAATCCAGTTTCAAGTTGGTGGAAATGAGCTGGTTTTTCAAGTCAAG 1526
Qy 1381 ACCCTGTCCCTGCCAGTGGTGTGATCGTTTCATGCGCAGCAGGACAACATGCGACGCCC 1440
Db 1527 ACCCTGTCCCTGCCAGTGGTGTGATCGTTTCATGCGCAGCAGGACAACATGCGACGCCC 1586
Qy 1441 ACTGTTCTCTGGGCAATGCTTTTGCAGAGCCTGGCAGGGTGCCATTTGCCGTGCCTGAC 1500
Db 1587 ACTGTTCTCTGGGCAATGCTTTTGCAGAGCCTGGCAGGGTGCCATTTGCCGTGCCTGAC 1646
Qy 1501 AAAGTGTGTGGCCACAGCTGTGTGAGCGCTCAACATGAAATTCAGAGCGCGAAGTGCAG 1560
Db 1647 AAAGTGTGTGGCCACAGCTGTGTGAGCGCTCAACATGAAATTCAGAGCGCGAAGTGCAG 1706
Qy 1561 AGCAACCGGGGCTTGACCAAGAGAACCTGTGTTCTTCCGCGCAGAACTGTTCAACAAC 1620
Db 1707 AGCAACCGGGGCTTGACCAAGAGAACCTGTGTTCTTCCGCGCAGAACTGTTCAACAAC 1766
Qy 1621 AGCAGCAGCCACCTGGAGGACTACAGTGGCCCTGTCTGTCTGCTGCCAGTTCAACAGG 1680
Db 1767 AGCAGCAGCCACCTGGAGGACTACAGTGGCCCTGTCTGTCTGCTGCCAGTTCAACAGG 1826

Qy 1581 GAGAAATTTACAGGACCGAATTAACATTTCTGGAATGTTTGAACGCTGTGATGGAAGTG 1740
Db 1827 GAGAAATTTACAGGACCGAATTAACATTTCTGGAATGTTTGAACGCTGTGATGGAAGTG 1886
Qy 1741 TTAATAAAACATCTCAAGCCCTCATTTGGAATGATGGGGCCATTTTGGGGTTTGTAAAACAAG 1800
Db 1887 TTAATAAAACATCTCAAGCCCTCATTTGGAATGATGGGGCCATTTTGGGGTTTGTAAAACAAG 1946
Qy 1801 CAACAGCCCATGACCTTACTGATTAACAAGCCAGATGGGACCTTCTCTCTGAGATTCAGT 1860
Db 1947 CAACAGCCCATGACCTTACTGATTAACAAGCCAGATGGGACCTTCTCTCTGAGATTCAGT 2006
Qy 1861 GACTCAGAAATGGCGGCATCAACATTCCTTGGAGTTTGNATTTCTCAGGAAGAAATGTTT 1920
Db 2007 GACTCAGAAATGGCGGCATCAACATTCCTTGGAGTTTGNATTTCTCAGGAAGAAATGTTT 2066
Qy 1921 TGAATCTGATGCTTTTACCAACAGAGACTTCTTCCATCAGGTCCCTAGCCGACCGCTTG 1980
Db 2067 TGGAACTGATGCTTTTACCAACAGAGACTTCTTCCATCAGGTCCCTAGCCGACCGCTTG 2126
Qy 1981 GGAGACTTTGAATTAACCTTATCTAGCTGTTTCTGATCGGCCAAAGATGAAGTATATCTCC 2040
Db 2127 GGAGACTTTGAATTAACCTTATCTAGCTGTTTCTGATCGGCCAAAGATGAAGTATATCTCC 2186
Qy 2041 AAATACTACACACAGTTCCCTGGAGTCTGCTACTTAAAGCTGTTGATGGATACGTG 2100
Db 2187 AAATACTACACACAGTTCCCTGGAGTCTGCTACTTAAAGCTGTTGATGGATACGTG 2246
Qy 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGATCTGCAGATGCCGGGGC 2160
Db 2247 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGATCTGCAGATGCCGGGGC 2306
Qy 2161 GGACAGCCCATGATACGACAGGCCCTTCCCAAGCTGTGTGTCTCCAGGCTCACTAT 2220
Db 2307 GGACAGCCCATGATACGACAGGCCCTTCCCAAGCTGTGTGTCTCCAGGCTCACTAT 2366
Qy 2221 AACATGTACCCACAGAACCCCTGACTCAGTCTTTCACACCGATGGGACTTCGATCTGGAG 2280
Db 2367 AACATGTACCCACAGAACCCCTGACTCAGTCTTTCACACCGATGGGACTTCGATCTGGAG 2426
Qy 2281 GACAAATGGACGCTAGCGCGCGTGTGGAGAGCTCTCTGGCGCGGCCAATGGACAGTCAAG 2340
Db 2427 GACAAATGGACGCTAGCGCGCGTGTGGAGAGCTCTCTGGCGCGGCCAATGGACAGTCAAG 2486
Qy 2341 TGAATCCCGCAGCACAATCGTGA 2364
Db 2487 TGGATCCCGCAGCACAATCGTGA 2510

RESULT 7

ADB72393

ID ADB72393 standard; mRNA; 2782 BP.

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

XX AC ADB72393;

XX AC AC

human; ss; cytostatic; gene therapy; vaccine; carcinoma; lymphomas;
cancer; neoplasm; adenocarcinoma; sarcoma.

Homo sapiens.

WO2003008583-A2.

30-JAN-2003.

26-DEC-2001; 2001WO-US051291.

02-MAR-2001; 2001US-00798586.

23-OCT-2001; 2001US-00004113.

PR 08-NOV-2001; 2001US-00052482.
PR 30-NOV-2001; 2001US-00997722.
PR 20-DEC-2001; 2001US-00034650.
XX
XX (SAGR-) SAGRES DISCOVERY.
XX Morris DW, Engelhard EK;
XX WPI; 2003-239337/23.
XX New recombinant nucleic acid, useful for treating carcinomas, lymphomas,
XX cancers, neoplasm, adenocarcinoma, or sarcomas.
XX Claim 1; SEQ ID NO 221; 2304pp; English.
XX The invention relates to a novel recombinant nucleic acid comprising a
XX nucleotide sequence selected from any of the 660 sequences fully defined
XX in the specification. A polynucleotide of the invention has cytostatic
XX activity, and may have a use in gene therapy, or in a vaccine. The
XX recombinant nucleic acids and polypeptides are useful for treating
XX carcinomas, e.g. lymphomas, cancers, neoplasm, adenocarcinoma, and
XX sarcomas. The present sequence represents a human mRNA of the invention.
XX
SQ Sequence 2782 BP; 669 A; 739 C; 801 G; 573 T; 0 U; 0 Other;
Query Match 100.0%; Score 2364; DB 10; Length 2782;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2364; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGGCTGTGGATCAAGCTCAGAGCTCCAAAGGAGAGCCCTTTCATCAGATGCAAGCG 60
DB 147 ATGGCTGTGGATCAAGCTCAGAGCTCCAAAGGAGAGCCCTTTCATCAGATGCAAGCG 206
QY 61 TTATATGCCAGCATTTTCCATTGAGCTGGGCATTTATTTATCCAGTGAATGAAGC 120
DB 207 TTATATGCCAGCATTTTCCATTGAGCTGGGCATTTATTTATCCAGTGAATGAAGC 266
QY 121 CAAGCATGGGACTCAGTAGACTTGTATATCCAGGAGAACATTAAGGCCACCCAGCTC 180
DB 267 CAAGCATGGGACTCAGTAGACTTGTATATCCAGGAGAACATTAAGGCCACCCAGCTC 326
QY 181 CTGAGGCGCTGGTCAGAGCTGCAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 240
DB 327 CTGAGGCGCTGGTCAGAGCTGCAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 386
QY 241 TTTTACTGAAGATCAAGCTGGGCACTATGCCACAGCTCCAGAACACGTATGACCGC 300
DB 387 TTTTACTGAAGATCAAGCTGGGCACTATGCCACAGCTCCAGAACACGTATGACCGC 446
QY 301 TGCCCATGGAGCTGGTCCGCTGCATCCGCATATATTGTACATGAACAGAGGTTGGTC 360
DB 447 TGCCCATGGAGCTGGTCCGCTGCATCCGCATATATTGTACATGAACAGAGGTTGGTC 506
QY 361 CGAAGGCCAACATGTAGCTCTCCAGCTGGAAGCCTTGTGTATGCCATGTCCAGAAA 420
DB 507 CGAAGGCCAACATGTAGCTCTCCAGCTGGAAGCCTTGTGTATGCCATGTCCAGAAA 566
QY 421 CACCTCCAGATCAACAGAGCTTTGAGAGCTGGAGCTGGTCAACGAGGACACAGAGAT 480
DB 567 CACCTCCAGATCAACAGAGCTTTGAGAGCTGGAGCTGGTCAACGAGGACACAGAGAT 626
QY 481 GAGTTAAAAGCTGCAGCAGACTCAGAGTACTTTCATCATCCAGTACAGAGAGCCTG 540
DB 627 GAGTTAAAAGCTGCAGCAGACTCAGAGTACTTTCATCATCCAGTACAGAGAGCCTG 686
QY 541 AGGATCCAAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCCGCCAGAGCGCTCAGCCGG 600
DB 687 AGGATCCAAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCCGCCAGAGCGCTCAGCCGG 746
QY 601 GAGAGCGCCCTCCAGCAGAGCAGGTGTCTCTGGAGGCTGGTTCAGCGGTGAGCAG 660
DB 747 GAGAGCGCCCTCCAGCAGAGCAGGTGTCTCTGGAGGCTGGTTCAGCGGTGAGCAG 806

QY 661 ACATGCGAGAGTACCGCTGAGAGTCCCGAGAGACACAGAGAGACCTTCAGCTGCTG 720
DB 807 ACATGCGAGAGTACCGCTGAGAGTCCCGAGAGACACAGAGAGACCTTCAGCTGCTG 866
QY 721 CGAAGCAGCAGACCATCATCTGATGACAGCTGATCCAGTGAAGCGCGGAGCAG 780
DB 867 CGAAGCAGCAGACCATCATCTGATGACAGCTGATCCAGTGAAGCGCGGAGCAG 926
QY 781 CTGCGCGGGAACCGCGGCGCCCGAGAGCGCTGAGAGCTGCTACAGTCTCTGGTGTGAG 840
DB 927 CTGCGCGGGAACCGCGGCGCCCGAGAGCGCTGAGAGCTGCTACAGTCTCTGGTGTGAG 986
QY 841 AAGTTGCGGAGATCATCTGCGAGAACCGGCGAGAGATCCGAGGGCTGAGACCTCTGC 900
DB 987 AAGTTGCGGAGATCATCTGCGAGAACCGGCGAGAGATCCGAGGGCTGAGACCTCTGC 1046
QY 901 CAGCAGCTGCCATTCCTCCGCGCCAGTGGAGAGAGTCTGGCGGAGGTCAACGCCACCATC 960
DB 1047 CAGCAGCTGCCATTCCTCCGCGCCAGTGGAGAGAGTCTGGCGGAGGTCAACGCCACCATC 1106
QY 961 ACGGACATTTATCTCAGCCCTGCTGACACGAGCAGCTTTCATCATTTGAGAAGCAGCTCCTCAG 1020
DB 1107 ACGGACATTTATCTCAGCCCTGCTGACACGAGCAGCTTTCATCATTTGAGAAGCAGCTCCTCAG 1166
QY 1021 GTCTGGAAGACCCAGACCAAGTTTTCAGGCCACTGTGCGCCTGCTGGTGGCGGGAAGCTG 1080
DB 1167 GTCTGGAAGACCCAGACCAAGTTTTCAGGCCACTGTGCGCCTGCTGGTGGCGGGAAGCTG 1226
QY 1081 AACGTGCATGAACCCCGCCAGGTGAAGGCCACCATCATCATGAGCAGCAGGCCAAG 1140
DB 1227 AACGTGCATGAACCCCGCCAGGTGAAGGCCACCATCATCATGAGCAGCAGGCCAAG 1286
QY 1141 TCTCTGCTCAAGAACGAGAACACCGCAATCATTTACAGTGGCGAGATCTTGAACAACTGC 1200
DB 1287 TCTCTGCTCAAGAACGAGAACACCGCAATCATTTACAGTGGCGAGATCTTGAACAACTGC 1346
QY 1201 TGCGTCAATGAGTACCACCAAGCCACAGCCACCTTTCAGTGGCCACTTCAGGAATATGTC 1260
DB 1347 TGCGTCAATGAGTACCACCAAGCCACAGCCACCTTTCAGTGGCCACTTCAGGAATATGTC 1406
QY 1261 CTGAAAACGAATTAAGAGTCAAGCTGCTGGGCGAGAGTGGTGACAGAGAGAAAAATTT 1320
DB 1407 CTGAAAACGAATTAAGAGTCAAGCTGCTGGGCGAGAGTGGTGACAGAGAGAAAAATTT 1466
QY 1321 ACAATCTCTGTTGAATCCAGTTCAGTTCGTGGAATGAGCTGTTTTCAGTCAAG 1380
DB 1467 ACAATCTCTGTTGAATCCAGTTCAGTTCGTGGAATGAGCTGTTTTCAGTCAAG 1526
QY 1381 ACCCTGTCCCTGCCAGCTGGTGTGATCGTTTCATGCGCAGCAGGACAAATGCGACGGCC 1440
DB 1527 ACCCTGTCCCTGCCAGCTGGTGTGATCGTTTCATGCGCAGCAGGACAAATGCGACGGCC 1586
QY 1441 ACTGTTCTCTGGGCAATGCTTTTTCAGAGCTGCGCAGGGTGCCATTTTCGGTGTGCTGAC 1500
DB 1587 ACTGTTCTCTGGGCAATGCTTTTTCAGAGCTGCGCAGGGTGCCATTTTCGGTGTGCTGAC 1646
QY 1501 AAAGTGTGTGGCCACAGCTGTGTGAGCGCTCAACATGAATTCAGAGCGGAGTGCAG 1560
DB 1647 AAAGTGTGTGGCCACAGCTGTGTGAGCGCTCAACATGAATTCAGAGCGGAGTGCAG 1706
QY 1561 AGCAACCGGGGCTTGACCAAGGAGAACCTCGTGTTCCTGGCGGCGAGAACTGTTCACAAAC 1620
DB 1707 AGCAACCGGGGCTTGACCAAGGAGAACCTCGTGTTCCTGGCGGCGAGAACTGTTCACAAAC 1766
QY 1621 AGCAGCAGCCACCTGGAGGACTACAGTGGCTGTCTGTGCTCTGCTGCTCCAGTTCACAGG 1680
DB 1767 AGCAGCAGCCACCTGGAGGACTACAGTGGCTGTCTGTGCTCTGCTGCTCCAGTTCACAGG 1826
QY 1681 GAGAAATTTACAGAGCGGAATTAACCTTTCGGCAATGGTTTGAAGTGTGATGGAAGTG 1740
DB 1827 GAGAAATTTACAGAGCGGAATTAACCTTTCGGCAATGGTTTGAAGTGTGATGGAAGTG 1886
QY 1741 TTAAAAAACAATCTCAAGCCTCATTTGGAATTCATGCGGCGCAATTTTGGGGCTTTGTTAAACAAG 1800

Db 1887 TTAATAAACATCTCAAGCCCTCATTTGGATGATGGGCCCATTTTGGGGTTTGTAAACAAG 1946
Qy 1801 CAACAGGCCCATGACCTACTAGTAATTAACAAGCCAGATGGGACCTTCTCTCGAGATTCAAGT 1860
Db 1947 CAACAGGCCCATGACCTACTAGTAATTAACAAGCCAGATGGGACCTTCTCTCGAGATTCAAGT 2006
Qy 1861 GACTCAGAAATTGGGGCATCACCATTGCTTGGGAAGTTTGATCTTCAGGAAGAAATGTTT 1920
Db 2007 GACTCAGAAATTGGGGCATCACCATTGCTTGGGAAGTTTGATCTTCAGGAAGAAATGTTT 2066
Qy 1921 TGGAAATCTGATGCCCTTTTACCACAGAGACTTCTCCATCAGGTCCTTAGCCGACCGCTTG 1980
Db 2067 TGGAAATCTGATGCCCTTTTACCACAGAGACTTCTCCATCAGGTCCTTAGCCGACCGCTTG 2126
Qy 1981 GGAGACTTGAATTAACCTTATCTAGTGTTCCTGATCGGCCAAAGATGAAGTATATCTCC 2040
Db 2127 GGAGACTTGAATTAACCTTATCTAGTGTTCCTGATCGGCCAAAGATGAAGTATATCTCC 2186
Qy 2041 AAATACTACACACAGTTCCCTGGAGTCTGCTACTGCTAAAGCTGTTGATGGATACGTG 2100
Db 2187 AAATACTACACACAGTTCCCTGGAGTCTGCTACTGCTAAAGCTGTTGATGGATACGTG 2246
Qy 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGGC 2160
Db 2247 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGGC 2306
Qy 2161 GGCAGGCCAGTACATGGACACAGGCCCTTCCAGCTGTGTGTCCCGAGGCTCACTAT 2220
Db 2307 GGCAGGCCAGTACATGGACACAGGCCCTTCCAGCTGTGTGTCCCGAGGCTCACTAT 2366
Qy 2221 AACATGTACCCACAGAACCTGACTCAGTCTCTGCACACCGATGGGACTTCGATCTGGAG 2280
Db 2367 AACATGTACCCACAGAACCTGACTCAGTCTCTGCACACCGATGGGACTTCGATCTGGAG 2426
Qy 2281 GACACAAATGGACGTAGCGCGCGTGTGGAGGAGCTCCTGGGCCGCGCAATGGACAGTCAG 2340
Db 2427 GACACAAATGGACGTAGCGCGCGTGTGGAGGAGCTCCTGGGCCGCGCAATGGACAGTCAG 2486
Qy 2341 TGGATCCCGCACGCGACAAATCGTGA 2364
Db 2487 TGGATCCCGCACGCGACAAATCGTGA 2510

RESULT 8

AD95903
ID ADE95903 standard; DNA; 2782 BP.
XX AC ADE95903;
XX DT 12-FEB-2004 (first entry)
XX DE Human DNA related to STAT5B gene mRNA.
XX KW cancer diagnosis; cancer treatment; carcinoma; cytostatic; gene therapy;
XX KW lymphoma; breast cancer; prostate cancer; leukaemia; ds; human; STAT5B.
XX OS Homo sapiens.
XX FN WO2003039484-A2.
XX PD 15-MAY-2003.
XX PF 08-NOV-2002; 2002WO-US036071.
XX PR 08-NOV-2001; 2001US-00052482.
XX PA (SAGR-) SAGRES DISCOVERY.
XX FI Morris DW, Engelhard BK;
XX DR WPI; 2003-441462/41.
XX

PT New carcinoma associated nucleic acids and proteins, useful for screening
PT drug candidates, or for diagnosing and treating carcinomas, e.g.
PT lymphoma, breast cancer, prostate cancer or leukemia.
XX Claim 1; SEQ ID NO 161; 793pp; English.
XX
CC This invention relates to novel recombinant nucleic acids for use in
CC diagnosis and treatment of cancer, especially carcinomas, as well as the
CC use of compositions in screening methods. The compositions of the
CC invention may have cytostatic activity whilst the disclosed sequences may
CC be useful for gene therapy. The carcinoma associated nucleic acids and
CC proteins are useful for diagnosing and treating carcinomas, for example
CC lymphoma, breast cancer, prostate cancer or leukaemia, or for screening
CC drug candidates or bioactive agents capable of binding to, or modulating
CC the activity of, a carcinoma associated protein. The present sequence is
CC a DNA sequence which represents the mRNA derived from the human STAT5B
CC gene which is a carcinoma associated gene of the invention.
XX
SQ Sequence 2782 BP; 669 A; 739 C; 801 G; 573 T; 0 U; 0 Other;

Query Match 100.0%; Score 2364; DB 10; Length 2782;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2364; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 ATGGCTGTGGATACAAAGCTCAGCAGCTCAAGGAGAAGCCCTTCATCAGATGCAAGCG 60
Db 147 ATGGCTGTGGATACAAAGCTCAGCAGCTCAGGAGAAGCCCTTCATCAGATGCAAGCG 206
Qy 61 TTATATGCCAGCATTTTCCCATTTAGGTCGGCATTATTTATCCAGTGGATTGAAGC 120
Db 207 TTATATGCCAGCATTTTCCCATTTAGGTCGGCATTATTTATCCAGTGGATTGAAGC 266
Qy 121 CAAGCATGGGACTCAGTAGATCTTGATATCCACAGAGAACATTAAAGCCACCAGCTC 180
Db 267 CAAGCATGGGACTCAGTAGATCTTGATATCCACAGAGAACATTAAAGCCACCAGCTC 326
Qy 181 CTGAGGGCTGTGTGAGGAGCTGCAGAGAAGCAGACACAGGTGGGGAAGATGGG 240
Db 327 CTGAGGGCTGTGTGAGGAGCTGCAGAGAAGCAGACACAGGTGGGGAAGATGGG 386
Qy 241 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAAACAGTATGACCGC 300
Db 387 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAAACAGTATGACCGC 446
Qy 301 TGCCCCATGGAGCTGGTCCGCTGCATCCGCATATATTGTACATGACAGAGGTTGGTC 360
Db 447 TGCCCCATGGAGCTGGTCCGCTGCATCCGCATATATTGTACATGACAGAGGTTGGTC 506
Qy 361 CGAGAAGCCAAATGGTAGCTCTCCAGCTGGAGCCCTTGCTGATGCCATGTGCCAGAAA 420
Db 507 CGAGAAGCCAAATGGTAGCTCTCCAGCTGGAGCCCTTGCTGATGCCATGTGCCAGAAA 566
Qy 421 CACCTCCAGATCAACAGACGTTTGGAGAGCTGCGACTGTGTCAGCGAGGACACAGAGAT 480
Db 567 CACCTCCAGATCAACAGACGTTTGGAGAGCTGCGACTGTGTCAGCGAGGACACAGAGAT 626
Qy 481 GAGTAAAAAAGCTGCAGCAGACTCAGGAGTACTTTCATCATCCAGTACCAGGAGCGCTG 540
Db 627 GAGTAAAAAAGCTGCAGCAGACTCAGGAGTACTTTCATCATCCAGTACCAGGAGCGCTG 686
Qy 541 AGGATCCAAGCTCAGTTTGGCCCGCTGAGCCCGAGCTGAGCCCGCCAGGAGCGCTCAGCGG 600
Db 687 AGGATCCAAGCTCAGTTTGGCCCGCTGAGCCCGAGCTGAGCCCGCCAGGAGCGCTCAGCGG 746
Qy 601 GAGACGGCCCTCCAGCAGAAAGCAGGTTCTCTGAGGCGCTTGGTTGACGCGTGAAGCAG 660
Db 747 GAGACGGCCCTCCAGCAGAAAGCAGGTTCTCTGAGGCGCTTGGTTGACGCGTGAAGCAG 806
Qy 661 ACACCTGACAGTACCGCTGGAGCTGCCCGAGAGCACACAGAGACCTTCGACCTGCTG 720
Db 807 ACACCTGACAGTACCGCTGGAGCTGCCCGAGAGCACACAGAGACCTTCGACCTGCTG 866
Qy 721 CGGAAGCAGCAGACCATCATCTCTGGATGACGAGCTGATCCAGTGGAAAGCGCGGACGAG 780

Db 867 CGGAAGCAGCAGCACCATCATCTGATGACGAGCTGATCCAGTGAAGCGCGCAGCAG 926
Qy 781 CTGGCCGGGAAAGCGCGGCCCCCGAGAGGCGAGCTGCTACAGTCTCTGCTGCTGAG 840
Db 927 CTGGCCGGGAAAGCGCGGCCCCCGAGAGGCGAGCTGCTACAGTCTCTGCTGCTGAG 986
Qy 841 AAGTTGGCGGAGATCATCTGGCAGAAACCGGAGCAGATCCGAGGCTGAGCACCCTCTGC 900
Db 987 AAGTTGGCGGAGATCATCTGGCAGAAACCGGAGCAGATCCGAGGCTGAGCACCCTCTGC 1046
Qy 901 CAGCAGCTGCCCATCCCCGGGCCAGTGGAGAGATGCTGGCGAGGTCAACGCCACCATC 960
Db 1047 CAGCAGCTGCCCATCCCCGGGCCAGTGGAGAGATGCTGGCGAGGTCAACGCCACCATC 1106
Qy 961 ACGGACATATCTCAGCCCTGGTGACACGACGCTTCATCATTTGAAGACGACCTCTCAG 1020
Db 1107 ACGGACATATCTCAGCCCTGGTGACACGACGCTTCATCATTTGAAGACGACCTCTCAG 1166
Qy 1021 GTCTGGAAGACCCAGACCAAGTTTGCAGCCTGCTGCGCTGCTGGTGGCGGGAAGCTG 1080
Db 1167 GTCTGGAAGACCCAGACCAAGTTTGCAGCCTGCTGCGCTGCTGGTGGCGGGAAGCTG 1226
Qy 1081 AACGTGCAATGAACCCCCCGAGTGAAGGCCACCATCATCAGTGAGCAGAGGCCAAG 1140
Db 1227 AACGTGCAATGAACCCCCCGAGTGAAGGCCACCATCATCAGTGAGCAGAGGCCAAG 1286
Qy 1141 TCTCTGCTCAAGAACGAGAACACCCGCAATGATTTACAGTGGGAGATCTTGAACACTGC 1200
Db 1287 TCTCTGCTCAAGAACGAGAACACCCGCAATGATTTACAGTGGGAGATCTTGAACACTGC 1346
Qy 1201 TGCGTATGGAGTATACACCAAGCAGCAGCACCCTTAGTGCCACTTCAGAGAAATATGCC 1260
Db 1347 TGCGTATGGAGTATACACCAAGCAGCAGCACCCTTAGTGCCACTTCAGAGAAATATGCC 1406
Qy 1261 CTGAACCGAAATTAAGAGTTCAGACCGTCTGGGGCAGAGTCCGTGACAGAAAGAAATTT 1320
Db 1407 CTGAACCGAAATTAAGAGTTCAGACCGTCTGGGGCAGAGTCCGTGACAGAAAGAAATTT 1466
Qy 1321 ACAATCTCTTTGAATCCAGTTTCAAGTGTGGTGAATAGAGCTGGTTTTCAAGTCAAG 1380
Db 1467 ACAATCTCTTTGAATCCAGTTTCAAGTGTGGTGAATAGAGCTGGTTTTCAAGTCAAG 1526
Qy 1381 ACCCTGTCCCTGCCAGTGTGTGATCGTTCAATGCGCAGCAGGACCAATGCGACGCCC 1440
Db 1527 ACCCTGTCCCTGCCAGTGTGTGATCGTTCAATGCGCAGCAGGACCAATGCGACGCCC 1586
Qy 1441 ACTGTTCTCTGGGACAAATGCTTTTGCAGAGCCTGCGAGGGTGCCATTTGCCGTGCTGAC 1500
Db 1587 ACTGTTCTCTGGGACAAATGCTTTTGCAGAGCCTGCGAGGGTGCCATTTGCCGTGCTGAC 1646
Qy 1501 AAGTGTCTGGGCCACAGCTGTGTGAGGGCTCAACATGAATTCAGAGCCGAGAGTGAG 1560
Db 1647 AAGTGTCTGGGCCACAGCTGTGTGAGGGCTCAACATGAATTCAGAGCCGAGAGTGAG 1706
Qy 1561 AGCAACCGGGCCCTGACCAAGAGAACCTCGTTCTGGCGCAGAACTGTTCAACAC 1620
Db 1707 AGCAACCGGGCCCTGACCAAGAGAACCTCGTTCTGGCGCAGAACTGTTCAACAC 1766
Qy 1621 AGCAGCAGCACCTGGAGACTTACAGTGGCCCTGTCTGTCTGCTGCTGCCAGTTCAACAGG 1680
Db 1767 AGCAGCAGCACCTGGAGACTTACAGTGGCCCTGTCTGTCTGCTGCCAGTTCAACAGG 1826
Qy 1681 GAGAAATTTACAGAGCGGAAATTAACATTTCTGGGCAATGTTTGAACGAGTGAAGTG 1740
Db 1827 GAGAAATTTACAGAGCGGAAATTAACATTTCTGGGCAATGTTTGAACGAGTGAAGTG 1886
Qy 1741 TTAATAAACATCTCAGCCTCATTTGGAATGATGGGGCCATTTGGGGTTTGTAAACAG 1800
Db 1887 TTAATAAACATCTCAGCCTCATTTGGAATGATGGGGCCATTTGGGGTTTGTAAACAG 1946
Qy 1801 CAACAGGCCCATGACTACTGATTAACCAAGCCAGATGGACCTTCTCTGAGATTTCAGT 1860

Db 1947 CAACAGGCCCATGACTACTGATTAACCAAGCCAGATGGGACCTTCTCTGAGATTCACT 2006
Qy 1861 GACTCAGAAAATTGGCGGCATCACCATTTGCTTTGGAGTTTGAATTTCTCAGAAAGAAATGTTT 1920
Db 2007 GACTCAGAAAATTGGCGGCATCACCATTTGCTTTGGAGTTTGAATTTCTCAGAAAGAAATGTTT 2066
Qy 1921 TGGAAATCTGATGCTCTTTTACCACAGAGACTTCTCCATCAGGTCCCTAGCCGACCGCTTG 1980
Db 2067 TGGAAATCTGATGCTCTTTTACCACAGAGACTTCTCCATCAGGTCCCTAGCCGACCGCTTG 2126
Qy 1981 GGAGACTTGAATTAACCTTATCTAGTGTGTTCTGATCGGCCAAAAGATGAAGTATACTCC 2040
Db 2127 GGAGACTTGAATTAACCTTATCTAGTGTGTTCTGATCGGCCAAAAGATGAAGTATACTCC 2186
Qy 2041 AAATACTACACACAGATTTCCCTGCGAGTCTCTACTCTGCTAAAGCTGTTGATGGATACGTG 2100
Db 2187 AAATACTACACACAGATTTCCCTGCGAGTCTCTACTCTGCTAAAGCTGTTGATGGATACGTG 2246
Qy 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGC 2160
Db 2247 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGC 2306
Qy 2161 GGCAGGCCACGATACATGAGCAGGCCCTCCAGCTGTGTGCCAGGCTCACTAT 2220
Db 2307 GGCAGGCCACGATACATGAGCAGGCCCTCCAGCTGTGTGCCAGGCTCACTAT 2366
Qy 2221 AACATGTACCCACAGAACCCCTGACTCAGTCTCTTGACACCGATGGGACTTCGATCTGGAG 2280
Db 2367 AACATGTACCCACAGAACCCCTGACTCAGTCTCTTGACACCGATGGGACTTCGATCTGGAG 2426
Qy 2281 GACCAATGAGACGTAGCGCGCGGTGTGGAGGAGCTCTCTGGGCGGCCCAATGGACAGTCAG 2340
Db 2427 GACCAATGAGACGTAGCGCGCGGTGTGGAGGAGCTCTCTGGGCGGCCCAATGGACAGTCAG 2486
Qy 2341 TGGATCCCGCACGCAACATCTGTA 2364
Db 2487 TGGATCCCGCACGCAACATCTGTA 2510

RESULT 9
ADP82726
ID ADP82726 standard; DNA; 2364 BP.
XX AC ADP82726;
XX DX 12-AUG-2004 (first entry)
XX Human STAT5B protein encoding sequence.
DE pluriptency; signal transducer and activator of transcription 5; STAT5;
KW Cytostatic; Dermatological; Antiinflammatory; Antithyroid; Antidiabetic;
KW Hepatotrophic; Nephrotropic; Cardiant; prophylaxis; ds.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT CDS 1..2364
XX FT /*tag= a
XX FT /product= "STAT5B"
XX WO2004042040-A1.
XX PN 21-MAY-2004.
XX PD 23-OCT-2003; 2003WO-JP013579.
XX PF 08-NOV-2002; 2002JP-00326190.
XX PR (REPR-) REPROCELL INC.
XX PA Nakauchi H, Iwama A;
XX PI WPI; 2004-411515/38.
XX DR

DR P-PSDB; ADP82727.
XX
PT New composition comprising active STAT5 or an agent capable of activating
PT STAT5, useful for maintaining the expansion, pluripotency, or self-
PT replication ability of a stem cell.
XX
PS Claim 5; SEQ ID NO 3; 249pp; English.
XX
CC The present invention relates to a composition for maintaining the
CC expansion, pluripotency, or self-replication ability of a stem cell
CC comprises active signal transducer and activator of transcription 5
CC (STAT5), an agent capable of activating STAT5, and a nucleic acid
CC molecule encoding active STAT5. The STAT5, active STAT5, or an agent
CC capable of activating STAT5 is useful for maintaining the expansion,
CC pluripotency, or self-replication ability of a stem cell. The cell
CC obtained by treating a stem cell with active STAT5, or STAT5 and an agent
CC capable of activating the STAT5 is useful for the treatment or
CC prophylaxis of a disease or disorder in need of a stem cell or a
CC differentiated cell derived from it, or for preparing a medicament for
CC the treatment or prophylaxis of the disease or disorder. Diseases include
CC atrichia, melanoma, cutis malignant lymphoma, hemangiosarcoma,
CC histiocytosis, hydroa, pustulosis, dermatitis, or eczema. It also
CC includes hypothalamus/hypophysis diseases, thyroid gland diseases,
CC accessory thyroid gland diseases, lipid metabolism abnormality, inborn
CC error of metabolism, hyperbilirubinemia, hyperbilirubinuria, mast cell
CC deficiency, diabetes insipidus, dwarfism, or Wolman's disease. It further
CC includes liver cirrhosis, pancreatitis, pancreas cancer, kidney diseases,
CC bladder diseases, male/female genital organ disease, heart failure, or
CC myocardial infarction. The present sequence represents STAT5B protein
CC encoding sequence.
XX
SQ Sequence 2364 BP; 593 A; 637 C; 665 G; 469 T; 0 U; 0 Other;

Query Match 99.7%; Score 2356; DB 12; Length 2364;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2359; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 ATGCTGTGTGGATACAAAGCTCAGAGCTCAAGAGAGAGCCCTTCATCAGATGCAAGCG 60
Db 1 ATGCTGTGTGGATACAAAGCTCAGAGCTCAAGAGAGAGCCCTTCATCAGATGCAAGCG 60

Qy 61 TTATATGCGCCAGCATTTTCCCATTTAGGTGGGCAATTTATCCAGTGATTTGAAAGC 120
Db 61 TTATATGCGCCAGCATTTTCCCATTTAGGTGGGCAATTTATCCAGTGATTTGAAAGC 120

Qy 121 CAAGCATGGGACTCAGTAGATCTTTGATTAATCCACAGGAGAACATTAAGGCCACCCAGCTC 180
Db 121 CAAGCATGGGACTCAGTAGATCTTTGATTAATCCACAGGAGAACATTAAGGCCACCCAGCTC 180

Qy 181 CTGAGGCGCTGGTGCAGGAGCTGCAGAGAGGAGGACAGGAGGAGGAGATGGG 240
Db 181 CTGAGGCGCTGGTGCAGGAGCTGCAGAGAGGAGGACAGGAGGAGGAGATGGG 240

Qy 241 TTTTCTACGAAATCAAGCTCGGCGCATATCCACACAGCTCCAGAACACCTATGACCGC 300
Db 241 TTTTCTACGAAATCAAGCTCGGCGCATATCCACACAGCTCCAGAACACCTATGACCGC 300

Qy 301 TGCCCCATGGAGCTGGTCCGCTGCATCCGCCATATTTGTACAATGAACAGAGGTTGGTC 360
Db 301 TGCCCCATGGAGCTGGTCCGCTGCATCCGCCATATTTGTACAATGAACAGAGGTTGGTC 360

Qy 361 CGAAGGCCAACATGTTAGCTCTCCAGCTGGAGGCTTGTGATGCCATGTCCTCCAGAAA 420
Db 361 CGAAGGCCAACATGTTAGCTCTCCAGCTGGAGGCTTGTGATGCCATGTCCTCCAGAAA 420

Qy 421 CACCTCCAGATCAACAGACGCTTTGAGAGCTGGAGCTGCAGCGAGGACACAGAGAT 480
Db 421 CACCTCCAGATCAACAGACGCTTTGAGAGCTGGAGCTGCAGCGAGGACACAGAGAT 480

Qy 481 GAGTTAAAAAGCTGCAGCAGACTCAGGAGTACTTTTCATCCAGTACCAGGAGAGCCTG 540
Db 481 GAGTTAAAAAGCTGCAGCAGACTCAGGAGTACTTTTCATCCAGTACCAGGAGAGCCTG 540

Qy 541 AGATCAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCCGCCAGGAGCGCTCTCAGCGCG 600
Db 541 AGATCAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCCGCCAGGAGCGCTCTCAGCGCG 600

Qy 601 GAGACGCGCTCCAGCAGAGAGAGGTTCTCTGGAGGCTGGTTTGCAGCGTGAGGCAAG 660
Db 601 GAGACGCGCTCCAGCAGAGAGAGGTTCTCTGGAGGCTGGTTTGCAGCGTGAGGCAAG 660

Qy 661 ACATGACAGTAGTACCGCTGGAGCTCCCGAGNAGCACCAGAGAGCCTTGACCTGCTG 720
Db 661 ACATGACAGTAGTACCGCTGGAGCTCCCGAGNAGCACCAGAGAGCCTTGACCTGCTG 720

Qy 721 CGGAAGCAGCAGACCATCATCTCGATGACAGCTGATCCAGTGGAAAGCGCGCAGCAG 780
Db 721 CGGAAGCAGCAGACCATCATCTCGATGACAGCTGATCCAGTGGAAAGCGCGCAGCAG 780

Qy 781 CTGSCCGGGAAACGGCGGGCCCCCGAGGGCAGCTTGACGCTGTACAGTCTCTGTTGAG 840
Db 781 CTGSCCGGGAAACGGCGGGCCCCCGAGGGCAGCTTGACGCTGTACAGTCTCTGTTGAG 840

Qy 841 AAGTTGGCGGAGATCATCTGGCAGAACCGGACAGAGATCCGAGGGCTGACACCTCTGC 900
Db 841 AAGTTGGCGGAGATCATCTGGCAGAACCGGACAGAGATCCGAGGGCTGACACCTCTGC 900

Qy 901 CAGCAGCTGCGCATCCCGCGCCAGTGAGAGATGCTGGCCGAGGTCAACGCCACCATC 960
Db 901 CAGCAGCTGCGCATCCCGCGCCAGTGAGAGATGCTGGCCGAGGTCAACGCCACCATC 960

Qy 961 ACGGACATATTCTCAGCCCTGGTGACACGAGTTCATTCATTTGAGAAAGAGCCTCTCAG 1020
Db 961 ACGGACATATTCTCAGCCCTGGTGACACGAGTTCATTCATTTGAGAAAGAGCCTCTCAG 1020

Qy 1021 GTCTGAAGACCCAGACCAAGTTTGGACCACTGTGCGCTCTGTTGGGGGGGAGAGCTG 1080
Db 1021 GTCTGAAGACCCAGACCAAGTTTGGACCACTGTGCGCTCTGTTGGGGGGGAGAGCTG 1080

Qy 1081 AACGTGCACATGAACACCCCGCCAGGTGAAGGCCACCATCATCAGTGAGCAGCAGGCCAAG 1140
Db 1081 AACGTGCACATGAACACCCCGCCAGGTGAAGGCCACCATCATCAGTGAGCAGCAGGCCAAG 1140

Qy 1141 TCTCTGCTCAAGAACAGAGAACACCCGCAATGATTACAGTGCGCGAGATCTTTGAAACAACCTGC 1200
Db 1141 TCTCTGCTCAAGAACAGAGAACACCCGCAATGATTACAGTGCGCGAGATCTTTGAAACAACCTGC 1200

Qy 1201 TGCGTATGAGATACCAAGAACACACCTTAGTGCCCACTTTCAGGAAATATGTCC 1260
Db 1201 TGCGTATGAGATACCAAGAACACACCTTAGTGCCCACTTTCAGGAAATATGTCC 1260

Qy 1261 CTGAAACGAAATTAAGAGGTCAGACCGCTGTTGGGGCAGAGTCGGTGACAGAAAGAAAATTT 1320
Db 1261 CTGAAACGAAATTAAGAGGTCAGACCGCTGTTGGGGCAGAGTCGGTGACAGAAAGAAAATTT 1320

Qy 1321 ACAATCTCTGTTGAATCCCAAGTTTCAAGTGGTGGAAATGAGCTGGTTTTTCAAGTCAAG 1380
Db 1321 ACAATCTCTGTTGAATCCCAAGTTTCAAGTGGTGGAAATGAGCTGGTTTTTCAAGTCAAG 1380

Qy 1381 ACCGTGCTCCCTGCAGCTGGTGGTATCGTTATGCGAGCAGGACCAATGCGACGCGC 1440
Db 1381 ACCGTGCTCCCTGCAGCTGGTGGTATCGTTATGCGAGCAGGACCAATGCGACGCGC 1440

Qy 1441 ACTGTTCTCTGGGCAATGCTTTTTCAGAGGCTGGAGGGTGCCATTTGCCGTGCCCTGAC 1500
Db 1441 ACTGTTCTCTGGGCAATGCTTTTTCAGAGGCTGGAGGGTGCCATTTGCCGTGCCCTGAC 1500

Qy 1501 AAAGTGTGTGGCCACAGCTGTGTGAGGCGCTCAACATGAAATTTCAAGGGCCGAAGTGCAG 1560
Db 1501 AAAGTGTGTGGCCACAGCTGTGTGAGGCGCTCAACATGAAATTTCAAGGGCCGAAGTGCAG 1560

Qy 1561 AGCAACCGGGGCTGACCAAGGAGAACTGTGTCTGGCGGAGAACTGTTCAACAAAC 1620
Db 1561 AGCAACCGGGGCTGACCAAGGAGAACTGTGTCTGGCGGAGAACTGTTCAACAAAC 1620

Qy 1621 AGCAGCAGCCACCTGGAGGAGCTACAGTGGGCTGTCTGTCTCTGCTGCCAGTTCACACAGG 1680

Db 1621 AGCAGCACCACCTGGAGGACTACAGTGGCCTGTGTGTCTGCTCCAGTTCACACAGG 1680
Qy 1681 GAGAAATTTACAGACGGAATTTACACTTTCTGGCAATGGTTTGGCGTGTGATGGAAGTG 1740
Db 1691 GAGAAATTTACAGACGGAATTTACACTTTCTGGCAATGGTTTGGCGTGTGATGGAAGTG 1740
Qy 1741 TTAATAAACATCTCAAGCCTCATTTGGAATGATGGGCAATTTGGGGTTTGTAAACAAG 1800
Db 1741 TTAATAAACATCTCAAGCCTCATTTGGAATGATGGGCAATTTGGGGTTTGTAAACAAG 1800
Qy 1801 CAACAGGCCATGACTACTGATTAACAAAGCAGATGGGACCTTCTCTCGATTCAGT 1860
Db 1801 CAACAGGCCATGACTACTGATTAACAAAGCAGATGGGACCTTCTCTCGATTCAGT 1860
Qy 1861 GACTCAGAAATTTGGGGCATCACCATTGCTTGGAGTTTGAATTCCTCAGGAAGATGTTT 1920
Db 1861 GACTCAGAAATTTGGGGCATCACCATTGCTTGGAGTTTGAATTCCTCAGGAAGATGTTT 1920
Qy 1921 TGGAAATCTGATGCTTTTACCACAGAGACTTCTCCATCAGGTCCCTAGCCGACGGCTTG 1980
Db 1921 TGGAAATCTGATGCTTTTACCACAGAGACTTCTCCATCAGGTCCCTAGCCGACGGCTTG 1980
Qy 1981 GGAGACTTGAATTAACCTTATCTAGTGTTCCTGATCGGCCAAAGATGAAGTATACCTC 2040
Db 1981 GGAGACTTGAATTAACCTTATCTAGTGTTCCTGATCGGCCAAAGATGAAGTATACCTC 2040
Qy 2041 AAATACTACACACAGTTCCTCGAGTCTCTACTGTAAGCTGTTGATGGATACGTG 2100
Db 2041 AAATACTACACACAGTTCCTCGAGTCTCTACTGTAAGCTGTTGATGGATACGTG 2100
Qy 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGC 2160
Db 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGC 2160
Qy 2161 GGCAGCGCCAGTACATGACAGCCGCCCTCCAGCTGTGTGTCTCCAGGCTCACTAT 2220
Db 2161 GGCAGCGCCAGTACATGACAGCCGCCCTCCAGCTGTGTGTCTCCAGGCTCACTAT 2220
Qy 2221 AACATGTACCCACAGAACCTTGACTCAGTCTTGCACCCGATGGGACTTCGATCTGGAG 2280
Db 2221 AACATGTACCCACAGAACCTTGACTCAGTCTTGCACCCGATGGGACTTCGATCTGGAG 2280
Qy 2281 GACAAATGGAGTAGCGGCGCTGTGGAGAGCTCTCTGGCGCGCCAAATGCAGAGTCAG 2340
Db 2281 GACAAATGGAGTAGCGGCGCTGTGGAGAGCTCTCTGGCGCGCCAAATGCAGAGTCAG 2340
Qy 2341 TGGATCCCGCAGCAGCAATCGTGA 2364
Db 2341 TGGATCCCGCAGCAGCAATCGTGA 2364

RESULT 10
ABZ35008
ID ABZ35008 standard; cDNA; 2716 BP.
XX AC ABZ35008;
XX DT 05-FEB-2003 (first entry)
XX DE Human gene expression profile polynucleotide SEQ ID NO 120.
XX KW Human; artery; endothelium; umbilical; vein; aorta; pulmonary artery;
KW bronchial epithelium; prostate; muscle; lung fibroblast; osteoblast;
KW tumour; microarray; genome mapping; antibiotic; antiviral; antifungal;
KW gene expression; gene; ss.
XX OS Homo sapiens.
XX FN WO200274979-A2.
XX PD 26-SEP-2002.
XX

PF 20-MAR-2002; 2002WO-US008456.
PR 20-MAR-2001; 2001US-0276947P.
PA (ORTH) ORTHO CLINICAL DIAGNOSTICS INC.
PI Wan J, Wang Y;
XX WPI; 2002-740862/80.
XX New gene expression profile generated from primary, endothelial,
PT epithelial, and muscle cell types, useful for identifying disease
PT pathologies involving alterations of gene expression, e.g. cancer.
XX Claim 3; Page 305-306; 850pp; English.
XX The invention relates to a gene expression profile comprising one or more
CC genes (ABZ34889-ABZ35692) and generated from a cell type. The cell type
CC is a coronary artery endothelium, umbilical artery or vein endothelium,
CC aortic endothelium, dermal microvascular endothelium, pulmonary artery
CC endothelium, myometrium microvascular endothelium, keratinocyte
CC epithelium, bronchial epithelium, mammary epithelium, prostate
CC epithelium, renal cortical epithelium, renal proximal tubule epithelium,
CC small airway epithelium, renal epithelium, umbilical artery smooth
CC muscle, neonatal dermal fibroblast, pulmonary artery smooth muscle,
CC dermal fibroblast, neural progenitor cells, skeletal muscle, astrocytes,
CC aortic smooth muscle, mesangial cells, coronary artery smooth muscle,
CC bronchial smooth muscle, uterine smooth muscle, lung fibroblast,
CC osteoblasts or prostate stromal cell. The gene expression profile is used
CC for determining the level of RNA expression for a sample, determining the
CC phenotype of a cell and distinguishing cell types. The gene or a protein
CC expression profile is useful in identifying disease pathologies involving
CC alterations of gene expression. The assessment of expression profiles may
CC provide meaningful information with respect to tumour type and stage,
CC treatment methods, and prognosis. The gene or protein expression profile
CC may also be used for creating microarrays. The microarray is useful for
CC genetic and physical mapping of genomes. DNA sequencing, genetic or
CC medical diagnosis, genotyping of organisms, confirming cell or tissue
CC identifications and in identifying promising antibiotics, antiviral or
CC antifungal agents
XX SQ Sequence 2716 BP; 662 A; 707 C; 760 G; 587 T; 0 U; 0 Other;
Query Match 99.7%; Score 2356; DB 6; Length 2716;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2359; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Qy 1 ATGGCTGTGTGGATACAAAGCTCAGCAGCTCCAAGGAGAAGCCCTTCATCAGATGCAAGCG 60
Db 12 ATGGCTGTGTGGATACAAAGCTCAGCAGCTCCAAGGAGAAGCCCTTCATCAGATGCAAGCG 71
Qy 61 TTATATGGCAGCATTTTCCATTGAGTGGCGGCAATTTATCCAGTGGATGAAAGC 120
Db 72 TTATATGGCAGCATTTTCCATTGAGTGGCGGCAATTTATCCAGTGGATGAAAGC 131
Qy 121 CAGCAGTGGACTCAGTAGATCTTGAATCCACAGGAGAACATTAAGGCCACCAGCTC 180
Db 132 CAAGCATGGGACTCAGTAGATCTTGAATCCACAGGAGAACATTAAGGCCACCAGCTC 191
Qy 181 CTGAGGGCCCTGGTGCAGGAGCTGCAGAAGAGCAGACACAGGTGGGGAAGATGGG 240
Db 192 CTGAGGGCCCTGGTGCAGGAGCTGCAGAAGAGCAGACACAGGTGGGGAAGATGGG 251
Qy 241 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAAACAGTATGACCGC 300
Db 252 TTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAAACAGTATGACCGC 311
Qy 301 TGCCCCATGGAGCTGGTCCGCTGCATCCGCATATATTGTACATGAACAGAGTTGGTC 360
Db 312 TGCCCCATGGAGCTGGTCCGCTGCATCCGCATATATTGTACATGAACAGAGTTGGTC 371
Qy 361 CGAGAAGCCCAACAAATGGTAGCTCTCCAGCTGGGAAGCCCTTGCTGATGTCATGTCCAGAAA 420

Db	372	CGAAGCAACAAATGCTAGCTCTCCAGCTGGAAGCCTTGCTGATGCCATGTCCAGAAA	431
Qy	421	CACCTCCAGATCAACACAGAGCTTTGAGAGCTGGACTGGTCAAGCAGGACACAGAAAT	480
Db	432	CACCTCCAGATCAACACAGAGCTTTGAGAGCTGGACTGGTCAAGCAGGACACAGAAAT	491
Qy	481	GAGTTAAAAAGCTGACAGAGACTCAGAGTACTTTCATCTCCAGTACCAAGGAGAGCCTG	540
Db	492	GAGTTAAAAAGCTGACAGAGACTCAGAGTACTTTCATCTCCAGTACCAAGGAGAGCCTG	551
Qy	541	AGGATCAAGCTCAGTTTGGCCGCTGGCCAGCTGAGCCCCCAGGAGCGTCTGAGCCGG	600
Db	552	AGGATCAAGCTCAGTTTGGCCGCTGGCCAGCTGAGCCCCCAGGAGCGTCTGAGCCGG	611
Qy	601	GAGACGCCCTCCAGCAGAGCAGGTGTCTCTGAGAGCCCTGTTGACGCTGAGGACAG	660
Db	612	GAGACGCCCTCCAGCAGAGAGCAGGTGTCTCTGAGAGCCCTGTTGACGCTGAGGACAG	671
Qy	661	ACCTGACAGTAGTACCGCTGGAGCTGCCGAGAAGCACAGAAAGACCTTGCAGCTGCTG	720
Db	672	ACCTGACAGTAGTACCGCTGGAGCTGCCGAGAAGCACAGAAAGACCTTGCAGCTGCTG	731
Qy	721	CGGAAGCAGCAGACCATCATCTCTGGATGACAGCTGATCCAGTGAAGCGCGGSCAGCAG	780
Db	732	CGGAAGCAGCAGACCATCATCTCTGGATGACAGCTGATCCAGTGAAGCGCGGSCAGCAG	791
Qy	781	CTGGCCGGGAACGGCGGGCCCCCGAGGGCAGCTTGAAGCTGCTACAGTCTGTGTGTGAG	840
Db	792	CTGGCCGGGAACGGCGGGCCCCCGAGGGCAGCTTGAAGCTGCTACAGTCTGTGTGTGAG	851
Qy	841	AAAGTTGGCGGAGATCATCTGSCAGAACCGGCAGCAGATCCGAGGGCTGAGCACCTCTGC	900
Db	852	AAAGTTGGCGGAGATCATCTGSCAGAACCGGCAGCAGATCCGAGGGCTGAGCACCTCTGC	911
Qy	901	CAGCAGCTGCCATPCCCGGCCAGTAGTGAGAGATGCTGCGCGAGGTCAACGCCACCATC	960
Db	912	CAGCAGCTGCCATPCCCGGCCAGTAGTGAGAGATGCTGCGCGAGGTCAACGCCACCATC	971
Qy	961	ACGGACATTAATCTCAGCCCTGGTGACACGACGCTTTCATCTATGGAAGCAGCCTCTCAG	1020
Db	972	ACGGACATTAATCTCAGCCCTGGTGACACGACGCTTTCATCTATGGAAGCAGCCTCTCAG	1031
Qy	1021	GTCTGTAAGACCCAGACCAAGTTTGCAGCCACTGTGCGCTGCTGTGGTGGCGGAAGCTG	1080
Db	1032	GTCTGTAAGACCCAGACCAAGTTTGCAGCCACTGTGCGCTGCTGTGGTGGCGGAAGCTG	1091
Qy	1081	AACGTGCACATGAACCCCCCAGGTGAAGGCCACCATCATCAGTGAAGCAGGCGCAAG	1140
Db	1092	AACGTGCACATGAACCCCCCAGGTGAAGGCCACCATCATCAGTGAAGCAGGCGCAAG	1151
Qy	1141	TCTCTGCTCAAGAACGAGAACACCCGCAATGATTAAGTGGCGGAGATCTTGAACAACTGC	1200
Db	1152	TCTCTGCTCAAGAACGAGAACACCCGCAATGATTAAGTGGCGGAGATCTTGAACAACTGC	1211
Qy	1201	TGCGTCAATGGAGTACCAACGACCAAGCAGCAGCCTTGTAGTGCCCACTTCAGGAATATGCC	1260
Db	1212	TGCGTCAATGGAGTACCAACGACCAAGCAGCAGCCTTGTAGTGCCCACTTCAGGAATATGCC	1271
Qy	1261	CTGAACCAAAATTAAGAGGTGAGACCGTCTGGGSCAGAGTCGGTGAAGAGAAAAATTT	1320
Db	1272	CTGAACCAAAATTAAGAGGTGAGACCGTCTGGGSCAGAGTCGGTGAAGAGAAAAATTT	1331
Qy	1321	ACAATCTGTGTTGAATCCAGTTTCAGTGTGGTGGAAATGAGCTGGTTTTTCAAGTCAAG	1380
Db	1332	ACAATCTGTGTTGAATCCAGTTTCAGTGTGGTGGAAATGAGCTGGTTTTTCAAGTCAAG	1391
Qy	1381	ACCTGTCCCTGCGCAGTGGTGTGATCGTTTCATGGCAGCAGGACCAATGCGACGGCC	1440
Db	1392	ACCTGTCCCTGCGCAGTGGTGTGATCGTTTCATGGCAGCAGGACCAATGCGACGGCC	1451
Qy	1441	ACTGTTCTCTGGGCAAAATGCTTTTGCAGAGCCTGGCAGGGTGCCATTTGCCGTGCTGAC	1500
Db	1452	ACTGTTCTCTGGGCAAAATGCTTTTGCAGAGCCTGGCAGGGTGCCATTTGCCGTGCTGAC	1511

Qy	1501	AAAGTCTGTGGCCACAGCTGTGTGAGGCGCTCAACATGAATTCAGGCGGAGTGCAG	1560
Db	1512	AAAGTCTGTGGCCACAGCTGTGTGAGGCGCTCAACATGAATTCAGGCGGAGTGCAG	1571
Qy	1561	AGCAACCGGGCCCTGACCAAGGAGAACCTCGTGTTCCTGGCGCAGAAACTGTTCACAAC	1620
Db	1572	AGCAACCGGGCCCTGACCAAGGAGAACCTCGTGTTCCTGGCGCAGAAACTGTTCACAAC	1631
Qy	1621	AGCAGCAGCCACTGTGAGGACTACAGTGGCCTGTCTGTGTCTTGGTCCCAAGTTCACAGG	1680
Db	1632	AGCAGCAGCCACTGTGAGGACTACAGTGGCCTGTCTGTGTCTTGGTCCCAAGTTCACAGG	1691
Qy	1681	GAGAAATTTACACAGGACGGAATTAACCTTTCTGCGCAATGGTTTTCAGCGTGTGATGGAAGTG	1740
Db	1692	GAGAAATTTACACAGGACGGAATTAACCTTTCTGCGCAATGGTTTTCAGCGTGTGATGGAAGTG	1751
Qy	1741	TTAAAAAAACATCTCAAGCCTCATTTGGAATGATGGGGCCATTTTGGGGTTTGTAAAAAAG	1800
Db	1752	TTAAAAAAACATCTCAAGCCTCATTTGGAATGATGGGGCCATTTTGGGGTTTGTAAAAAAG	1811
Qy	1801	CAACAGGCCCATGACCTACTCTGATTAACAAGCCAGATGGGACCTTCTCTCTGAGATTCACT	1860
Db	1812	CAACAGGCCCATGACCTACTCTGATTAACAAGCCAGATGGGACCTTCTCTCTGAGATTCACT	1871
Qy	1861	GACTCAGAAATTCGGCGCATCACCATTTGCTTGAAGTTTTCATCTCAGGAAAGAAATGTTT	1920
Db	1872	GACTCAGAAATTCGGCGCATCACCATTTGCTTGAAGTTTTCATCTCAGGAAAGAAATGTTT	1931
Qy	1921	TGGAATCTGATGCTTTTACACACAGAGACTTCTCCATCAGGTCCCTAGCCGACCGCTTG	1980
Db	1932	TGGAATCTGATGCTTTTACACACAGAGACTTCTCCATCAGGTCCCTAGCCGACCGCTTG	1991
Qy	1981	GGAGACTTGAATTAACCTTATCTACGTGTTTCTGATCGGCCAAAAGATGAAGTATATCTCC	2040
Db	1992	GGAGACTTGAATTAACCTTATCTACGTGTTTCTGATCGGCCAAAAGATGAAGTATATCTCC	2051
Qy	2041	AAATACTACACACAGTTCCTCGGAGTCTGCTACTGCTAAAGCTGTTGATGGATACGTG	2100
Db	2052	AAATACTACACACAGTTCCTCGGAGTCTGCTACTGCTAAAGCTGTTGATGGATACGTG	2111
Qy	2101	AAAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGC	2160
Db	2112	AAAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGC	2171
Qy	2161	GGCAGCGCCACGTACATGAGACAGGCCCCCTCCAGCTGTGTGTGCCAGGCTCACTAT	2220
Db	2172	GGCAGCGCCACGTACATGAGACAGGCCCCCTCCAGCTGTGTGTGCCAGGCTCACTAT	2231
Qy	2221	AACATGTACCCACAGAACCTGACTCAGTCTTGTGACACCGATGGGACTTTCGATCTGGAG	2280
Db	2232	AACATGTACCCACAGAACCTGACTCAGTCTTGTGACACCGATGGGACTTTCGATCTGGAG	2291
Qy	2281	GACACAATGGACATAGCGCGCGTGTGGAGAGCTCTCTGGCGCGGCAATGGACAGTCAAG	2340
Db	2292	GACACAATGGACATAGCGCGCGTGTGGAGAGCTCTCTGGCGCGGCAATGGACAGTCAAG	2351
Qy	2341	TGATCCCGCACCAATCTGTA	2364
Db	2352	TGATCCCGCACCAATCTGTA	2375

RESULT 11

ABK84353	ID	ABK84353 standard; cDNA; 2716 BP.
XX	AC	ABK84353;
XX	AC	ABK84353;
DT	14-AUG-2002	(first entry)
XX	XX	Human cDNA differentially expressed in granulocytic cells #924.
DE	XX	Human; ss; granulocytic cell; DNA chip; bacterial infection;
KW	XX	

KW viral infection; parasitic infection; protozoal infection;
 KW fungal infection; sterile inflammatory disease; psoriasis;
 KW rheumatoid arthritis; glomerulonephritis; asthma; thrombosis;
 KW cardiac reperfusion injury; renal reperfusion injury; ARDS;
 KW adult respiratory distress syndrome; inflammatory bowel disease;
 KW Crohn's disease; ulcerative colitis; periodontal disease;
 KW granulocyte activation; chronic inflammation; allergy.

XX Homo sapiens.

XX WO200228999-A2.

XX 11-APR-2002.

XX 03-OCT-2001; 2001WO-US030821.

XX 03-OCT-2000; 2000US-0237189P.

XX (GENE-) GENE LOGIC INC.

XX Beazer-Barclay V, Weissman SM, Yamaga S, Vockley J;

XX WPI; 2002-435328/46.

XX Detecting granulocyte activation by detecting differential expression of
 PT genes associated with granulocyte activation, which serves as diagnostic
 PT markers that is useful for monitoring disease states and drug toxicity.

PS Claim 1; SEQ ID NO 924; 114pp; English.

XX The invention relates to detecting (M1) granulocyte (GC) activation
 CC (GCA), by detecting the level of expression of gene(s) (Gs) identified by
 CC DNA chip analysis as given in the specification, and comparing the
 CC expression level to an expression level in an unactivated GC, where are
 CC differential expression of Gs is indicative of GCA. Also included are
 CC modulating (M2) GA by contacting GC with an agent that alters the
 CC expression of at least one gene in Gs; (2) screening (M3) for an agent
 CC capable of modulating GCA or an inflammation (especially chronic) in a
 CC tissue, an allergic response in a subject, exposure of a subject to a
 CC pathogen or sterile inflammatory disease using the gene expression
 CC profile; (3) detecting (M4) an inflammation (especially chronic) in a
 CC tissue, an allergic response in a subject, exposure of a subject to a
 CC pathogen or sterile inflammatory disease, by detecting the level of
 CC expression in a sample of the tissue of gene(s) from Gs, where the level
 CC of expression of the gene is indicative of inflammation; (4) treating
 CC (M5) an inflammation (especially chronic) or in a tissue, an allergic
 CC response in a subject, exposure of a subject to a pathogen or sterile
 CC inflammatory disease, by contacting a tissue having inflammation with an
 CC agent that modulates the expression of gene(s) from Gs in the tissue. M1
 CC is useful for detecting GCA; M2 is useful for modulating GA; M3 is useful
 CC for screening an agent capable of modulating GCA preferably in an
 CC inflammation in a tissue; M4 is useful for detecting an inflammation
 CC (especially chronic) in a tissue, an allergic response in a subject,
 CC exposure of a subject to a pathogen or sterile inflammatory disease (e.g.
 CC psoriasis, rheumatoid arthritis, glomerulonephritis, asthma, thrombosis,
 CC cardiac reperfusion injury, renal reperfusion injury, ARDS, adult
 CC respiratory distress syndrome, inflammatory bowel disease, Crohn's
 CC disease, ulcerative colitis, periodontal disease; also bacterial
 CC infection, viral infection, parasitic infection, protozoal infection,
 CC fungal infection and M5 is useful for treating one of the above
 CC conditions. The present sequence represents a gene differentially
 CC expressed in granulocytes. Note: The sequence data for this patent did
 CC not form part of the printed specification, but was obtained in
 CC electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 2716 BP; 662 A; 707 C; 760 G; 587 T; 0 U; 0 Other;

Query Match 99.7%; Score 2356; DB 6; Length 2716;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 2359; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 ATGGCTGTGGATACAGCTCAGCAGCTCCAGGAGAGGCCCTTCATCAGATCAAGCG 60

Db	12	ATGGCTGTGGATACAGCTCAGCAGCTCCAGGAGAGGCCCTTCATCAGATCAAGCGG 71
Qy	61	TTATATGGCAGCATTTTCCATTGAGTGGCGGCAATTATTATCCCACTGATTTGAAGC 120
Db	72	TTATATGGCAGCATTTTCCATTGAGTGGCGGCAATTATTATCCCACTGATTTGAAGC 131
Qy	121	CAAGCATGGGACTCAGTAGATCTTTGATAATCCACAGGAGAACTTAAGAGCCACCCAGCTC 180
Db	132	CAAGCATGGGACTCAGTAGATCTTTGATAATCCACAGGAGAACTTAAGAGCCACCCAGCTC 191
Qy	181	CTGAGGGGCTGTGTGACAGAGCTGCAGAGAGGACAGACACAGCTCCAGACACAGTATGACGC 240
Db	192	CTGAGGGGCTGTGTGACAGAGCTGCAGAGAGGACAGACACAGCTCCAGACACAGTATGACGC 251
Qy	241	TTTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGACACAGTATGACGC 300
Db	252	TTTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGACACAGTATGACGC 311
Qy	301	TGCCCCATGGAGCTGGTCCGCTGCATCCGCAATATATTGTACATGAACAGAGCTTGCTC 360
Db	312	TGCCCCATGGAGCTGGTCCGCTGCATCCGCAATATATTGTACATGAACAGAGCTTGCTC 371
Qy	361	CGAGAACCAACAAATGTAGCTCTCCAGCTGGAAAGCCTTGCTGATGCCATGTCCAGAAA 420
Db	372	CGAGAACCAACAAATGTAGCTCTCCAGCTGGAAAGCCTTGCTGATGCCATGTCCAGAAA 431
Qy	421	CACCTCCAGATCAACAGAGCTTTGAGGAGCTCGACTGCTGACGAGGACACAGAGAAAT 480
Db	432	CACCTCCAGATCAACAGAGCTTTGAGGAGCTCGACTGCTGACGAGGACACAGAGAAAT 491
Qy	481	GAGTTAAAAAGCTGCAGCAGACTCAGAGTACTTTCATCATCCAGTACAGAGAGCCTG 540
Db	492	GAGTTAAAAAGCTGCAGCAGACTCAGAGTACTTTCATCATCCAGTACAGAGAGCCTG 551
Qy	541	AGGATCCAAAGCTCAGTTTGGCCCGCTGCGCCAGCTGAGCCCCCAGAGGCGCTCAGCGCG 600
Db	552	AGGATCCAAAGCTCAGTTTGGCCCGCTGCGCCAGCTGAGCCCCCAGAGGCGCTCAGCGCG 611
Qy	601	GAGAGCGCTCCAGCAGAGCAGTGTCTCTGGAGCGCTGGTTGACCGTGGAGGACAG 660
Db	612	GAGAGCGCTCCAGCAGAGCAGTGTCTCTGGAGCGCTGGTTGACCGTGGAGGACAG 671
Qy	661	ACACTGCAGCAGTACCCGCTGGAGCTGCCGAGAAACACAGAGAGACCTGCAGCTGCTG 720
Db	672	ACACTGCAGCAGTACCCGCTGGAGCTGCCGAGAAACACAGAGAGACCTGCAGCTGCTG 731
Qy	721	CGGAAGCAGCAGACCATCATCTCTGGATGACGAGCTGATCCAGTGGAAAGCGCGGACAG 780
Db	732	CGGAAGCAGCAGACCATCATCTCTGGATGACGAGCTGATCCAGTGGAAAGCGCGGACAG 791
Qy	781	CTGGCCGGGAAACGGCGGCCCCCGAGGCGAGCTGCAGCTGCTACAGTCTCTGCTGAG 840
Db	792	CTGGCCGGGAAACGGCGGCCCCCGAGGCGAGCTGCAGCTGCTACAGTCTCTGCTGAG 851
Qy	841	AAGTTGGCGAGATCATCTCTGGAGAACCGCAGCAGATCCGAGGCGCTGACACCTCTGC 900
Db	852	AAGTTGGCGAGATCATCTCTGGAGAACCGCAGCAGATCCGAGGCGCTGACACCTCTGC 911
Qy	901	CAGCAGCTGCCCATCTCCCGGCCCAAGTGGAGGAGATGCTGGCCGAGGTTCAACGCCACCATC 960
Db	912	CAGCAGCTGCCCATCTCCCGGCCCAAGTGGAGGAGATGCTGGCCGAGGTTCAACGCCACCATC 971
Qy	961	ACGACATATCTCAGCCCTGGTGACACAGCAGTTCATCATTTGAGAGACAGCTCTCTCAG 1020
Db	972	ACGACATATCTCAGCCCTGGTGACACAGCAGTTCATCATTTGAGAGACAGCTCTCTCAG 1031
Qy	1021	GTCTGAAGACCCAGACCAAGTTTGGAGCCACTGTGCGCTGCTGGTGGCGGGAAGCTG 1080
Db	1032	GTCTGAAGACCCAGACCAAGTTTGGAGCCACTGTGCGCTGCTGGTGGCGGGAAGCTG 1091
Qy	1081	AAGCTGCACATGAACCCCGCCAGGTGAAGGCCACCATCATCATGATGAGCAGCAGGCCAAG 1140

Db 1092 AACGTGCACATGAACCCCCCCCCAGGTGAAGCCACCATCATCAGTGAGCAGCGGCCAAG 1151
Qy 1141 TCTCTGCTCAAGAACGAGAACCCCGCAATGATTACAGTGGCGAGATCTTTGAACAACCTGC 1200
Db 1152 TCTCTGCTCAAGAACGAGAACCCCGCAATGATTACAGTGGCGAGATCTTTGAACAACCTGC 1211
Qy 1201 TGGGTCTATGAGTAGTACCACCAAGCCACAGGCACCTTAGTGCCCACTTCAGGAATATGTCC 1260
Db 1212 TGGGTCTATGAGTAGTACCACCAAGCCACAGGCACCTTAGTGCCCACTTCAGGAATATGTCC 1271
Qy 1261 CTGAAACGAATTAAGAGGTGAGACCGTCTGTTGGGCGCAGAGTCGGTGAAGAGAAAAATTT 1320
Db 1272 CTGAAACGAATTAAGAGGTGAGACCGTCTGTTGGGCGCAGAGTCGGTGAAGAGAAAAATTT 1331
Qy 1321 ACAATCCTGTTGAATCCCAAGTTCAGTGTGTTGGTGGAAATGAGCTGGTTTTCAAGTCAAG 1380
Db 1332 ACAATCCTGTTGAATCCCAAGTTCAGTGTGTTGGTGGAAATGAGCTGGTTTTCAAGTCAAG 1391
Qy 1381 ACCTGTCCCTGCGCAGTGGTGGTATCGTTTCATGGCAGCCAGGACCAACAATGCGAGCGCC 1440
Db 1392 ACCTGTCCCTGCGCAGTGGTGGTATCGTTTCATGGCAGCCAGGACCAACAATGCGAGCGCC 1451
Qy 1441 ACTGTTCTCTGGGACAATGCTTTTTCAGAGCCTGGCAGGCTGCCATTTGCCGTGCCCTGAC 1500
Db 1452 ACTGTTCTCTGGGACAATGCTTTTTCAGAGCCTGGCAGGCTGCCATTTGCCGTGCCCTGAC 1511
Qy 1501 AAAGTGTCTGGCCACAGCTGTGTGAGGCGCTCAACATGAATTCAGGCGCGAAGTGCAG 1560
Db 1512 AAAGTGTCTGGCCACAGCTGTGTGAGGCGCTCAACATGAATTCAGGCGCGAAGTGCAG 1571
Qy 1561 AGCAACCGGCGCTGACCAAGGAGAACCTCGTGTCTCTGGCGCAGAAACTGTTCAACAAC 1620
Db 1572 AGCAACCGGCGCTGACCAAGGAGAACCTCGTGTCTCTGGCGCAGAAACTGTTCAACAAC 1631
Qy 1621 AGCAGCAGCCACCTGGAGGACTACAGTGGCCTGTCTGTCTCTGCCAGTTCAACAGG 1680
Db 1632 AGCAGCAGCCACCTGGAGGACTACAGTGGCCTGTCTGTCTCTGCCAGTTCAACAGG 1691
Qy 1681 GAGAAATTACAGACCGGAATTACACTTCTTGGCAATGGTTTGAACGTGTGATGGAAGTG 1740
Db 1692 GAGAAATTACAGACCGGAATTACACTTCTTGGCAATGGTTTGAACGTGTGATGGAAGTG 1751
Qy 1741 TTTAAAAAACAATCTCAAGCCTCATTTGAATGATGGGCGCATTTTGGGGTTTGTAAAAAAG 1800
Db 1752 TTTAAAAAACAATCTCAAGCCTCATTTGAATGATGGGCGCATTTTGGGGTTTGTAAAAAAG 1811
Qy 1801 CAACAGGCCCATGACCTACTGATTAAACAAGCCAGATGGGACCTTCCTCTCAGATTTCAGT 1860
Db 1812 CAACAGGCCCATGACCTACTGATTAAACAAGCCAGATGGGACCTTCCTCTCAGATTTCAGT 1871
Qy 1861 GACTCAGAAATTGGCGGCATCACCATTTGCTTGGAAAGTTTGAATCTCAGGAAAGAAATGTTT 1920
Db 1872 GACTCAGAAATTGGCGGCATCACCATTTGCTTGGAAAGTTTGAATCTCAGGAAAGAAATGTTT 1931
Qy 1921 TGGAACTGATGCTTTTACCACAGAGACTTCTCCATCAGTCTCCCTAGCCGCGCTTG 1980
Db 1932 TGGAACTGATGCTTTTACCACAGAGACTTCTCCATCAGTCTCCCTAGCCGCGCTTG 1991
Qy 1981 GGAGACTTGAATTAACCTTATCTACTGTTTTCCTGATCGGCCAAAAGATGAAGTATATCTCC 2040
Db 1992 GGAGACTTGAATTAACCTTATCTACTGTTTTCCTGATCGGCCAAAAGATGAAGTATATCTCC 2051
Qy 2041 AAATACTACACACAGTTCCCTGGAGTCTGCTACTGCTAAAGCTGTGTGATGATACGTG 2100
Db 2052 AAATACTACACACAGTTCCCTGGAGTCTGCTACTGCTAAAGCTGTGTGATGATACGTG 2111
Qy 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACCATCTGACAGATGCCGGGGGC 2160
Db 2112 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACCATCTGACAGATGCCGGGGGC 2171
Qy 2161 GGCAGCGCCACGTACATGGACAGGCGCCCTCCCGAGCTGTGTCTCCCGAGGCTCACTAT 2220
Db 2172 GGCAGCGCCACGTACATGGACAGGCGCCCTCCCGAGCTGTGTCTCCCGAGGCTCACTAT 2231

Qy 2221 AACATGTATCCACAGAACCTGACTCAGTCTTTGACACCGATGGGACTTCGATCTGGAG 2280
Db 2232 AACATGTATCCACAGAACCTGACTCAGTCTTTGACACCGATGGGACTTCGATCTGGAG 2291
Qy 2281 GACACAATGGACGTAGCGGGCGTGTGGAGGAGCTCTGGGGCGGCCAATGGACAGTTCAG 2340
Db 2292 GACACAATGGACGTAGCGGGCGTGTGGAGGAGCTCTGGGGCGGCCAATGGACAGTTCAG 2351
Qy 2341 TGGATCCCGCAGCAGCAATCGTGA 2364
Db 2352 TGGATCCCGCAGCAGCAATCGTGA 2375

RESULT 12

ADM79353
ID ADM79353 standard; cDNA; 2779 BP.

XX
AC ADM79353;

XX
AC ADM79353;

XX
DT 03-JUN-2004 (first entry)

XX
Human lymphoma associated, LA, contig #3.

XX
ss: lymphoma associated protein; LAP; GNAS1; Pik3r1; G protein XI_as;
XX
NESP55; HIPK1; JAK1; neurogranin; Nrf2; lymphoma; leukaemia;
XX
gene therapy; DNA vaccine; wound; inflammation; human;
XX
expressed sequence tag; EST.

XX
Homo sapiens.

XX
US2003224460-A1.

XX
04-DEC-2003.

XX
24-SEP-2001; 2001US-00963131.

XX
22-SEP-2000; 2000US-00668644.

XX
13-JUL-2001; 2001US-00905390.

XX
13-JUL-2001; 2001US-00905491.

XX
(PEDE/) PEDERSEN F S.

XX
(SORE/) SORENSEN A B.

XX
(HERN/) HERNANDEZ J M.

XX
(NIEL/) NIELSEN A A.

XX
(MOVI/) MOVING H.

XX
Pedersen FS, Sorensen AB, Hernandez JM, Nielsen AA, Moving H;

XX
WPI; 2004-033970/03.

XX
Novel recombinant protein comprising lymphoma associated protein, useful
in treating lymphoma and leukemia.

XX
Disclosure; SEQ ID NO 158; 99pp; English.

XX
The invention relates to a recombinant protein comprising lymphoma
associated protein (LAP), chosen from a fully defined amino acid sequence
of human GNAS1, mouse Pik3r1, human Pik3r1, mouse G protein XI as, human
G protein XI as, mouse NESP55, human NESP55, mouse GNAS1, mouse HIPK1,
human HIPK1, mouse JAK1, human JAK1, mouse neurogranin, human
neurogranin, mouse Nrf2 and human Nrf2. LAP is useful for screening a
bioactive agent capable of binding to LAP. LAP is useful for screening a
bioactive agents capable for modulating the activity of LAP. Lymphoma
associated (LA) gene is useful for diagnosing lymphoma. LAP is useful for
treating lymphoma. LA gene is useful for diagnosing lymphomas or a
propensity to lymphomas. LA gene is useful for determining LA gene copy
number. LA genes are used as probe to determine chromosome location of
the LA gene. LA gene and LAP are useful in treating lymphoma and
leukaemia. LA gene is useful in gene therapy, useful as DNA vaccine. LA
gene is useful in generating animal models of lymphoma, which is useful
in screening bioactive molecules to treat lymphoma. LAP is useful in
treating wounds and inflammation. LAP is useful to generate polyclonal

CC and monoclonal antibodies. The present sequence represents a human CC lymphoma associated, LA, contig.

CC	and monoclonal antibodies. The present sequence represents a human
CC	lymphoma associated, LA, contig.
XX	
SQ	Sequence 2779 BP; 675 A; 735 C; 801 G; 559 T; 0 U; 9 Other;
	Query Match 97.9%; Score 2313.2; DB 12; Length 2779;
	Best Local Similarity 99.3%; Pred. No. 0;
	Matches 2349; Conservative 1; Mismatches 12; Indels 4; Gaps 3;
Qy	1 ATGGCTGTGATACAAAGCTCAGCACTCCAAGGAAGCCCTTCATCAGATGCAGCG 60
Dd	147 ATGGCTGTGGATACAAGCTCAGNAGCTCCNAGGAGAAGCCCTTCATCAGATGCAGCG 206
Qy	61 TTATATGGCAGCATTTTCCATTGAGGTGGGCAATTAATTATCCAGTGGATTG--AAA 118
Dd	207 TTATATGCCAGCATTTTCCCAITGAGTGCGGCAATTA-TTATCCCAGTGGATTGA AAAA 265
Qy	119 GCCAAGCATGGACTCAGTAGATCTTCATAATCCACAGGAGAACATTAAGGCCCAACCAGC 178
Dd	266 GCCAAGCATGGACTCAGTAGATC-TGATAATCCACAGGAGAACATTAAGGCCCAACCAGC 324
Qy	179 TCCTGGAGGCGCTGGTCAGGAGCTGCAGAAGAGGACAGACACAGGTGGGGGAAGATG 238
Dd	325 TCCTGGAGGCGCTGGTCAGGAGCTGCAGAAGAGGACAGACACAGGTGGGGGAAGATG 384
Qy	239 GGTTTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAACACGTATGACC 298
Dd	385 GGTTTTTNACTGNAGATGAAGCTGGGGCACTATGCCACACAGCTCCAGAACACGTATGACC 444
Qy	299 GCTGCCCATGGAGCTGGTCGGTGCATCGCCATATATTGTACATGAACAGAGTTGG 358
Dd	445 GCTGCCCATGGAGCTGGTCGGTGCATCGCCATATATTGTACATGAACAGAGTTGG 504
Qy	359 TCCGAGAAGCCAAATGTGTAGCTCTCCAGCTGGAAGCCTTGTGATGCCATGTCCACAGA 418
Dd	505 TCCGAGAAGCCAAATGTGTAGCTCTCCAGCTGGAAGCCTTGTGATGCCATGTCCACAGA 564
Qy	419 AACACCTCCAGATCAACACAGACGTTTGAGGAGCTGCCATGTGTCACGCGAGACACAGAGA 478
Dd	565 AACACCTCCAGATCAACACAGACGTTTGAGGAGCTGGACTGGTCACGCGAGACACAGAGA 624
Qy	479 ATGAGTTAAAAAGCTCGCAGAGACTCAGAGATCACTTCATCATCCAGTACAGGAGAGCC 538
Dd	625 ATGAGTTAAAAAGCTCGCAGNAGACTCAGAGTACTTCATCATCCAGTACAGGAGAGCC 684
Qy	539 TGAGGATCCAGCTCAGTTTGGCCGCTGGCCAGCTGAGCCCCCAGGAGCGTCTGAGCC 598
Dd	685 TGAGGATCCAGCTCAGTTTGGCCGCTGGCCAGCTGAGCCCCCAGGAGCGTCTGAGCC 744
Qy	599 GGGAGACGGCCCTCCACAGAAAGCAGGTGTCTTGAGAGGCTGGTTGCACCGCTGAGGCGAC 658
Dd	745 GGGAGACGGCCCTCCACAGAGCAGGTGTCTTGAGAGGCTGGTTGCACCGCTGAGGCGAC 804
Qy	659 AGACATGACAGAGTACCGGTGGAGCTGCCGAGAGACACAGAAAGACCCCTGCAGCTGC 718
Dd	805 AGACATGACAGAGTACCGGTGGAGCTGCCGAGAGACACAGAAAGACCCCTGCAGCTGC 864
Qy	719 TGGGAAGCAGCAGACCATCATCTGTGATCAGAGCTGATCCAGTGGAAAGCGCGGCGAGC 778
Dd	865 TGGGAAGCAGCAGACCATCATCTGTGATCAGAGCTGATCCAGTGGAAAGCGCGGCGAGC 924
Qy	779 AGCTGGCGGGAAACGGCGGCGCCCGCAGGCGAGCCTGGACGTGCTACAGTCTCTGGTGTG 838
Dd	925 AGCTGGCGGGAAACGGCGGCGCCCGCAGGCGAGCCTGGACGTGCTACAGTCTCTGGTGTG 984
Qy	839 AGAAGTTGGCGGAGATCATCTGGCAGAAACCGGCAGCAGATCCGCGAGGCTGAGCACCTCT 898
Dd	985 AGAAGAAAGCGGAGATCATCTGGCAGAAACCGGCAGCAGATCCGCGAGGCTGAGCACCTCT 1044
Qy	899 GCACAGAGCTGCCCATCCCGGCGCAGTGGAGGAGATGCTGGCCGAGGTCAAACGCCACCA 958
Dd	1045 GCCAGCAGCTGCCCATCCCGGCGCAGTGGAGGAGATGCTGGCCGAGGTCAAACGCCACCA 1104

Db 2185 CCAAATACTACACACAGTTCCCTCGCAGTCTGCTACTGCTAAAGCTGTTGATGATAAG 2244
Qy 2099 TGAAGCCACAGATCAAGCAAGTGTCTCCCTGAGTTGTGAAGCATCTGCAGATGCCGGGG 2158
Db 2245 TGAAGCCACAGATCAAGCAAGTGTCTCCCTGAGTTGTGAAGCATCTGCAGATGCCGGGG 2304
Qy 2159 GCGGCAGGCCACGTATACATGAGACAGGCCCCCTCCAGCTGTGTGTCGCCAGGCTCACT 2218
Db 2305 GCGGCAGGCCACGTATGAGACAGGCCCCCTCCAGCTGTGTGTCGCCAGGCTCACT 2364
Qy 2219 ATACATGTATCCACACAAACCTGACTCAGTCTTGTGACACCGATGGGACTTGCATCTGG 2278
Db 2365 ATACATGTATCCACACAAACCTGACTCAGTCTTGTGACACCGATGGGACTTGCATCTGG 2424
Qy 2279 AGGACACAATGAGAGTGTAGCGCGGTGTGAGGAGCTCTTGGGCGGCCAATGACAGTC 2338
Db 2425 AGGACACAATGAGAGTGTAGCGCGGTGTGAGGAGCTCTTGGGCGGCCAATGACAGTC 2484
Qy 2339 AGTGGATCCCGCAGCACAATCGTGA 2364
Db 2485 AGTGGATCCCGCAGCACAATCGTGA 2510

RESULT 'i3
ABSS1482
ID ABS51482 standard; cDNA; 2170 BP.
XX AC ABS51482;
XX DT 21-OCT-2002 (first entry)
XX DE Human cDNA encoding prey protein for Shigella ospCl #7.
XX ss; gene; prey protein; ospB; ospD1; ipaD; ipaC; ipaH9.8; ospG; ospCl;
KW Shigella; shigellosis; bacillary dysentery; antibacterial;
KW yeast two-hybrid system; protein-protein interaction; SID;
KW selected interacting domain; human.
XX OS Homo sapiens.
XX PN WO200257303-A2.
XX PD 25-JUL-2002.
XX PF 11-JAN-2002; 2002WO-EP000777.
XX PR 12-JAN-2001; 2001US-0261130P.
XX PA (HYBR-) HYBRIGENICS.
XX PI Legrain P;
XX WPI; 2002-599706/64.
XX P-PSDB; ABG70089.
XX New complex of protein-protein interactions between a bait Shigella
flexneri polypeptide and a prey mammalian or human placenta polypeptide
for treating or preventing bacillary dysentery in a mammal or human.
XX Claim 8; Page 74-75; 162pp; English.
XX The invention relates to a complex of protein-protein interactions
between a Shigella flexneri polypeptide (e.g. ospB, ospD1, ipaD, ipaC,
ipaH9.8, ospG and ospCl) and a mammalian polypeptide defined in the
specification. The complexes are formed using the yeast two-hybrid
system. Also included are (1) a recombinant host cell expressing the
interactions between the Shigella flexneri polypeptide and a mammalian
polypeptide defined in the specification; (2) selecting a modulating
compound that inhibits or activates the protein-protein interactions; (3)
a modulating compound obtained from the method of (2); (4) a SID
(selected interacting domain) polypeptide or its fragment or variant
comprising the human polypeptides appearing as ABG70042-ABG70242; (5) a

CC SID polynucleotide or its fragment or variant comprising encoding the
CC above polypeptides a vector comprising (5); (6) a recombinant host cell
CC containing the vector; and (10) a protein chip comprising Shigella
CC flexneri polypeptide and a mammalian polypeptide defined in the
CC specification. A pharmaceutical composition comprising the compound,
CC polypeptide or polynucleotide is useful for treating or preventing
CC shigellosis (bacillary dysentery) in a human or mammal. The present
CC sequence encodes a human prey protein isolated by the yeast two-hybrid
CC assay, forming a complex of the invention with a shigella protein
XX
SQ Sequence 2170 BP; 542 A; 590 C; 615 G; 423 T; 0 U; 0 Other;
Query Match 91.8%; Score 2170; DB 6; Length 2170;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2170; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 195 GCAGGAGCTGCAGAAAGGACGAGCACACAGCTCCAGAACAGTATGATGCGCTGCCCATGGAGCT 254
Db 1 GCAGGAGCTGCAGAAAGGACGAGCACACAGCTCCAGAACAGTATGATGCGCTGCCCATGGAGCT 60
Qy 255 CAAGCTGGGGCACTATGCCACACAGCTCCAGAACAGTATGATGCGCTGCCCATGGAGCT 314
Db 61 CAAGCTGGGGCACTATGCCACACAGCTCCAGAACAGTATGATGCGCTGCCCATGGAGCT 120
Qy 315 GGTCCGCTGCATCCGCCATATATTGTACAAATGAACAGAGTTGGTCCGAGAAGCCAAACAA 374
Db 121 GGTCCGCTGCATCCGCCATATATTGTACAAATGAACAGAGTTGGTCCGAGAAGCCAAACAA 180
Qy 375 TGGTAGCTCTCCAGCTGGAAAGCCTTGTGATGTCATGTCCCAAGAAACACCTCCAGATCAA 434
Db 181 TGGTAGCTCTCCAGCTGGAAAGCCTTGTGATGTCATGTCCCAAGAAACACCTCCAGATCAA 240
Qy 435 CCAGAGCTTTGAGAGCTGCGACTGGTCCAGCAGGACACAGAGATGATGATTAAGAGCT 494
Db 241 CCAGAGCTTTGAGAGCTGCGACTGGTCCAGCAGGACACAGAGATGATGATTAAGAGCT 300
Qy 495 GCAGCAGACTCAGAGTACTTTCATATCCAGTACCAGAGAGCTGAGAGTCCAAAGCTCA 554
Db 301 GCAGCAGACTCAGAGTACTTTCATATCCAGTACCAGAGAGCTGAGAGTCCAAAGCTCA 360
Qy 555 GTTTGGCCCGCTGGCCAGCTGAGCCCCCAGAGCGTCTGAGCCGGGAGACGGCCCTCCA 614
Db 361 GTTTGGCCCGCTGGCCAGCTGAGCCCCCAGAGCGTCTGAGCCGGGAGACGGCCCTCCA 420
Qy 615 GCAGAGCAGGTGTCTCTGAGAGCCTGGTTGACAGCTGAGGACACAGACATGACAGCAGTA 674
Db 421 GCAGAGCAGGTGTCTCTGAGAGCCTGGTTGACAGCTGAGGACACAGACATGACAGCAGTA 480
Qy 675 CCGCGTGGAGCTGCCGAGAGCACACAGAGACCCCTGACGTGCTGCGGAGCAGCAGAC 734
Db 481 CCGCGTGGAGCTGCCGAGAGCACACAGAGACCCCTGACGTGCTGCGGAGCAGCAGAC 540
Qy 735 CATCATCTGGATGACAGCTGATCCAGTGGAAAGCGCGCAGCAGCTGGCCGGGAACGG 794
Db 541 CATCATCTGGATGACAGCTGATCCAGTGGAAAGCGCGCAGCAGCTGGCCGGGAACGG 600
Qy 795 CGGGCCCCCGAGGAGCAGCTGACAGCTGCTACAGTCTGCTGTGAGAGTGGCGGAGAT 854
Db 601 CGGGCCCCCGAGGAGCAGCTGACAGCTGCTACAGTCTGCTGTGAGAGTGGCGGAGAT 660
Qy 855 CATCTGSCAGAACCGGACGAGATCCGACGGCTGAGCAGCTCTGCCAGCAGCTGCCCAT 914
Db 661 CATCTGSCAGAACCGGACGAGATCCGACGGCTGAGCAGCTCTGCCAGCAGCTGCCCAT 720
Qy 915 CCGCGGCCAGTGGAGAGATGCTGGCCGAGGTCAACGCCACCACCATCAACGACATATATCTC 974
Db 721 CCGCGGCCAGTGGAGAGATGCTGGCCGAGGTCAACGCCACCACCATCAACGACATATATCTC 780
Qy 975 AGCCCTGGTACACAGCAGCTTCATTCATTGAGAGCAGCTCTCTCAGTCTCTGAAGACCA 1034
Db 781 AGCCCTGGTACACAGCAGCTTCATTCATTGAGAGCAGCTCTCTCAGTCTCTGAAGACCA 840
Qy 1035 GACCAAGTTTGCAGCCACTGTGCGCCTGTGCTGGGGGGGAGAGCTGAACGCTGCACATGAA 1094

[illegible]

Db	1921	GCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCGCGGGGGCGGACGCCACGTA	198
Qy	2175	CATGGACACAGGCCCTCCCCAGCTGTGTCTCCCGAGGCTCACTATAAATGATGACCCACA	2234
Db	1981	CATGGACACAGGCCCTCCCCAGCTGTGTCTCCCGAGGCTCACTATAAATGATGACCCACA	2040
Qy	2235	GAACCCCTGACTCAGTCTCTTGACACCGATGGGACTTTCGATCTCGAGGACACAAATGGACGT	2294
Db	2041	GAACCCCTGACTCAGTCTCTTGACACCGATGGGACTTTCGATCTCGAGGACACAAATGGACGT	2100
Qy	2295	AGCGCGGCGTGTGGAGGAGCTCTCTGGCGCGGCAATGGACAGTCAGTGGATCCCGCACGC	2354
Db	2101	AGCGCGGCGTGTGGAGGAGCTCTCTGGCGCGGCAATGGACAGTCAGTGGATCCCGCACGC	2160
Qy	2355	ACAATCGTGA	2364
Db	2161	ACAATCGTGA	2170
RESULT 14			
AC	ID	ACN40207	
XX	ID	ACN40207 standard; cDNA; 2776 BP.	
AC	AC	ACN40207;	
XX	DT	18-NOV-2004 (first entry)	
XX	XX	Tumour-associated antigenic target (TAT) cDNA DNA326348, SEQ ID NO:4849.	
DE	DE	Tumour-associated antigenic target; TAT; human; overexpression; cancer;	
XX	KW	tumour; diagnosis; cell proliferative disorder; breast cancer;	
KW	KW	colorectal cancer; lung cancer; ovarian cancer; liver cancer;	
KW	KW	central nervous system cancer; bladder cancer; pancreatic cancer;	
KW	KW	cervical cancer; melanoma; leukaemia; hybridisation probe;	
KW	KW	chromosome identification; chromosome mapping; gene mapping;	
XX	XX	gene therapy; cytostatic; gene; ss.	
OS	OS	Homo sapiens.	
XX	PN	WO2004030615-A2.	
XX	XX	15-APR-2004.	
XX	PD		
XX	PF	29-SEP-2003; 2003WO-US028547.	
XX	XX		
XX	PR	02-OCT-2002; 2002US-0414971P.	
XX	XX	(GETH) GENENTECH INC.	
PA	PA	Wu TD, Zhang Z, Zhou Y;	
XX	PI		
XX	PI	WPI; 2004-347921/32.	
XX	DR		
XX	XX	New tumor-associated antigenic target polypeptides and nucleic acids,	
XX	PT	useful in preparing a medicament for treating or detecting a	
PT	PT	proliferative disorder, e.g. breast, lung, colorectal, ovarian or	
PT	PT	prostate cancer or tumor.	
XX	XX	Claim 1; SEQ ID NO 4849; 7273pp; English.	
PS	PS		
XX	XX	The invention relates to human tumour-associated antigenic target (TAT)	
CC	CC	polypeptides, and their related nucleic acids. The TAT polypeptides are	
CC	CC	overexpressed in cancer tissues compared to normal tissues, and may thus	
CC	CC	serve as effective targets for the diagnosis and treatment of cancer in	
CC	CC	mammals. The invention also relates to nucleic acid and polypeptide	
CC	CC	sequences at least 80% identical to the TAT nucleic acids and	
CC	CC	polypeptides; expression vectors and host cells comprising a TAT nucleic	
CC	CC	acid; an antibody specific for a TAT polypeptide; a peptide or organic	
CC	CC	molecule which binds to a TAT polypeptide; fusion proteins comprising a	
CC	CC	TAT polypeptide; and methods and compositions for the treatment or	
CC	CC	diagnosis of cancer in mammals. TAT polypeptides, nucleic acids,	
CC	CC	antibodies, antagonists, binding molecules and compositions are useful	
CC	CC	for diagnosing or treating a cell proliferative disorder associated with	

CC increased TAR expression, particularly cancers such as breast cancer,
CC colorectal cancer, lung cancer, ovarian cancer, liver cancer, bladder
CC cancer, pancreatic cancer, cervical cancer, cancers of the central
CC nervous system, melanoma and leukaemia. TAR nucleic acids may further be
CC used as hybridisation probes, in chromosome and gene mapping, in
CC chromosome identification and in gene therapy. The present sequence
XX represents a TAR nucleic acid of the invention

SQ Sequence 2776 BP; 607 A; 684 C; 734 G; 513 T; 0 U; 238 Other;

Query Match 87.7%; Score 2073.2; DB 13; Length 2776;

Best Local Similarity 88.9%; Pred. No. 0;

Matches 2101; Conservative 0; Mismatches 256; Indels 7; Gaps 1;

QY	1	ATGGCTGTGGATACAAGCTCAGACCTCGAGGAGAGCCCTTCATCAGATGCAAGCG	60
DB	148	ATGGCTGTGGATACAAGCTCAGACCTCGAGGAGAGCCCTTCATCAGATGCAAGCG	207
QY	61	TTATATGGCCAGCATTTTCCATTGAGGTGGGCATTATTATCCCAAGTGGATTGAAAGC	120
DB	208	TTATATGGCCAGCATTTTCCATTGAGGTGGGCATTATTATCCCAAGTGGATTGAAAGC	267
QY	121	CAAGCATGGGACTCAGTAGATCTTGAATAATCCACAGAGAACATTAAGGCCACCCAGCTC	180
DB	268	CAAGCATGGGACTCAGTAGATCTTGAATAATCCACAGAGAACATTAAGGCCACCCAGCTC	327
QY	181	CTGAGGGCCCTGTGTCAGGAGCTGCAGAAAGGCAGACACAGGTGGGGGAAGATGGG	240
DB	328	CTGAGGGCCCTGTGTCAGGAGCTGCAGAAAGGCAGACACAGGTGGGGGAAGATGGG	387
QY	241	TTTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAACACGTATGACCGC	300
DB	388	TTTTTACTGAAGATCAAGCTGGGGCACTATGCCACACAGCTCCAGAACACGTATGACCGC	447
QY	301	TGCCCCATGGAGCTGGTCCGCTGCATCCGCCATATATTGTACAAATGAACAGAGTTGGTC	360
DB	448	TGCCCCATGGAGCTGGTCCGCTGCATCCGCCATATATTGTACAAATGAACAGAGTTGGTC	507
QY	361	CGAAGCCCAACATGTAGTCTCCAGCTGGAGCTTGGTATGCCATGTCCAGAAA	420
DB	508	CGAAGCCCAACATGTAGTCTCCAGCTGGAGCTTGGTATGCCATGTCCAGAAA	567
QY	421	CACCTCCAGATCAACACAGAGCTTTGAGAGCTGGAGCTGCAGCAGGACACAGAGAAAT	480
DB	568	CACCTCCAGATCAACACAGAGCTTTGAGAGCTGGAGCTGCAGCAGGACACAGAGAAAT	627
QY	481	GAGTTAAAAAGCTGCAGCAGACTCAGGAGTACTTTCATATCCAGTACCAAGAGAGCCTG	540
DB	628	GAGTTAAAAAGCTGCAGCAGACTCAGGAGTACTTTCATATCCAGTACCAAGAGAGCCTG	687
QY	541	AGGATCCAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCGCCAGGAGCGTCTGAGCCGG	600
DB	688	AGGATCCAAGCTCAGTTTGGCCCGCTGGCCAGCTGAGCCGCCAGGAGCGTCTGAGCCGG	747
QY	601	GAGACGGCCCTCCACAGAGAGCAGGTCTCTGAGAGCCCTGGTTGACAGCGTGGAGCACAG	660
DB	748	GAGACGGCCCTCCACAGAGAGCAGGTCTCTGAGAGCCCTGGTTGACAGCGTGGAGCACAG	807
QY	661	ACACTGCAGCAGTACCCGCTGGAGCTGCCGAGAGACACAGAGACCCCTGCAGCTCTG	720
DB	808	ACACTGCAGCAGTACCCGCTGGAGCTGCCGAGAGACACAGAGACCCCTGCAGCTCTG	867
QY	721	CGAAGCAGCAGACCATTCCTGGATGACAGCTGATCCAGTGGAGAGCGCGGACAGCAG	780
DB	868	CGAAGCAGCAGACCATTCCTGGATGACAGCTGATCCAGTGGAGAGCGCGGACAGCAG	927
QY	781	CTGSCCGGGAAACGGCGGCCCTCCAGGAGCCTGGACGTGTACAGTCTCGTGTGTGAG	840
DB	928	CTGSCCGGGAAACGGCGGCCCTCCAGGAGCCTGGACGTGTACAGTCTCGTGTGTGAG	987
QY	841	AAGTTGGCGGAGATCATCTGSCAGAACCGGCAGCAGATCCGAGGGCTGAGCACTCTGC	900
DB	988	AAGTTGGCGGAGATCATCTGSCAGAACCGGCAGCAGATCCGAGGGCTGAGCACTCTGC	1047

QY	901	CAGCAGTCCCATCCCGGCCAGGTGGAGAGATGCTGSCGAGGTCAACGCCACCATC	960
DB	1048	CAGCAGTCCCATCCCGGCCAGGTGGAGAGATGCTGSCGAGGTCAACGCCACCATC	1107
QY	961	ACGGACATTTATCTCAGCCCTGTGTGACACGACACCTTTCATCATTGAGAAGCAGCCTCTCAG	1020
DB	1108	ACGGACATTTATCTCAGCCCTGTGTGACACGACACCTTTCATCATTGAGAAGCAGCCTCTCAG	1167
QY	1021	GTCTGAGAGCCAGACCAAGTTTTCAGCCACTGTGCGCTGCTGTTGGCGGGGAAGCTG	1080
DB	1168	GTCTGAGAGCCAGACCAAGTTTTCAGCCACTGTGCGCTGCTGTTGGCGGGGAAGCTG	1227
QY	1081	AACGTGCACATGAACCCCGCCAGGTGAAGGCCACCATCATCAGTCAGCAGCAGGCCAAG	1140
DB	1228	AACGTGCACATGAATCCCCCGCAGGTGAAGGCCACCATCATCAGTCAGCAGGCCAAG	1287
QY	1141	TCCTCTGCTCAAGAACAGAGAACACCCGCAATGATTACAGTGGCGGAGATCTTTGAACAACTGC	1200
DB	1288	TCCTCTGCTTAAATAATGAGAACACCCGCAANNNNNNNTGGTGAGATCTCTGAACAACTGC	1347
QY	1201	TGCGTCATGGAGTACACCAAGCCACAGGCACCTTTAGTCCCACTTTCAGGAATATGTCC	1260
DB	1348	TGCGTCATGGAGTACACCAAGCCACAGGCACCTTTAGTCCCACTTTCAGGAATATGTCC	1400
QY	1261	CTGAACGAAATTAAGAGTCAGACCCGTCTGTGGGCAGAGTCGGTGACAGAGAAAAATTT	1320
DB	1401	NN	1460
QY	1321	ACAATCTGTGTTGAATCCCACTCAGTTCAGTGTGGTGGAAATGAGCTGGTTTTTCAAGTCAAG	1380
DB	1461	NN	1520
QY	1381	ACCCTGTCCCTGCCAGTGGTGGTATCTGTCATGGCAGCCAGGACAAACAATGGCAGCGCC	1440
DB	1521	NN	1580
QY	1441	ACTGTCTCTGGGACAATGCTTTTCAGAGCCCTGGCAGGTCATTTGCGCTGCCTTGAC	1500
DB	1581	NN	1640
QY	1501	AAAGTGTGTGGCCACAGCTGTGTGAGCGCTCAACATGAAATTCAGGCGCGAAGTGCAG	1560
DB	1641	AAAGTGTGTGGCCAGCAGCTGTGTGAGCGCTCAACATGAAATTCAGGCGCGAAGTGCAG	1700
QY	1561	AGCAACGGGGCCCTGACCAAGGAGAACCTCTGTTCTTCTGCGCAGAGAACTGTTCAACAAC	1620
DB	1701	AGCAACGGGGCCCTGACCAAGGAGAACCTCTGTTCTTCTGCGCAGAGAACTGTTCAACAAC	1760
QY	1621	AGCAGCAGCCACTGGAGGACTACAGTGGCTCTGTGTCTGCTGGTCCCAAGTTCAACAGG	1680
DB	1761	AGCAGCAGCCACTGGAGGACTACAGTGGCTCTGTGCTGCTGGTCCCAAGTTCAACAGG	1820
QY	1681	GAGAAATTTACAGGACGGAAATTAACATTTCTGGCAATGGTTTGAACGCTGTGATGGAAGTG	1740
DB	1821	GAGAAATTTACAGGACGGAAATTAACATTTCTGGCAATGGTTTGAACGCTGTGATGGAAGTG	1880
QY	1741	TTAAAAAACAATCTCAAGCCCTCATTTGGAATGATGGGCCCATTTTGGGGTTTGTAAAAAAG	1800
DB	1881	TTAAAAAACAATCTCAAGCCCTCATTTGGAATGATGGGCCCATTTTGGGGTTTGTAAAAAAG	1940
QY	1801	CAACAGCCCATCAGCTTACTGATTAAACAGCCAGATGGGACCTTCTCTCTGAGATTTCAGT	1860
DB	1941	CAACAGCCCATCAGCTTACTGATTAAACAGCCAGATGGGACCTTCTCTCTGAGATTTCAGT	2000
QY	1861	GACTCAGAAAATGGCGGCATCACCATTGCTTGGAAAGTTTGATTTCTCAGGAAAGAAATGTTT	1920
DB	2001	GACTCAGAAAATGGCGGCATCACCATTGCTTGGAAAGTTTGATTTCTCAGGAAAGAAATGTTT	2060
QY	1921	TGGAATCTGATGCTTTTACCAACAGAGACTTCTTCATCAGGTCCCTAGCCGACCGCTTG	1980
DB	2061	TGGAATCTGATGCTTTTACCAACAGAGACTTCTTCATCAGGTCCCTAGCCGACCGCTTG	2120

QY 1981 GGAGACTTGAATTAACCTTATCTACGTGTTTCTGTATCGGCCCAAAAGATGAAGTATACCTCC 2040
DB 2121 GGAGACTTGAATTAACCTTATCTACGTGTTTCTGTATCGGCCCAAAAGATGAAGTATACCTCC 2180
QY 2041 AAATACTACACACAGTTCCCTGGAGTCTGCTACTGCTAAAGCTGTTGATGGATACGTG 2100
DB 2181 AAATACTACACACAGTTCCCTGGAGTCTGCTACTGCTAAAGCTGTTGATGGATACGTG 2240
QY 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGGC 2160
DB 2241 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGCATCTGCAGATGCCGGGGGC 2300
QY 2161 GGCAGCGCCACGTATACATGCAACAGCCCTCCCGAGCTGTGTGTCCTCCAGGCTCACTAT 2220
DB 2301 GGCAGCGCCACGTATACATGCAACAGCCCTCCCGAGCTGTGTGTCCTCCAGGCTCACTAT 2360
QY 2221 AACATGTACCCACACAGAACCTGACTCAGTCTTGCACCCGATGGGACTTTCGATCTGGAG 2280
DB 2361 AACATGTACCCACACAGAACCTGACTCAGTCTTGCACCCGATGGGACTTTCGATCTGGAG 2420
QY 2281 GACCAATGGAGCTAGCGCGCGGTGTGGAGGAGCTCCTGGCGCGCCCAATGGACAGTCCAG 2340
DB 2421 GACCAATGGAGCTAGCGCGCGGTGTGGAGGAGCTCCTGGCGCGCCCAATGGACAGTCCAG 2480
QY 2341 TGGATCCCGCAGCACAAATCGTGA 2364
DB 2481 TGGATCCCGCAGCACAAATCGTGA 2504

RESULT 15
ADB58436
ID ADB58436 standard; DNA; 2671 BP.

AC ADB58436;

DT 04-DEC-2003 (first entry)

DE Toxicity-related gene, SEQ ID 3462.

KW Toxic; toxin; gene expression profile; hepatotoxicity; liver;
KW drug screening; toxicity assay; ds.

OS Unidentified.

PN WO2003064624-A2.

PD 07-AUG-2003.

PP 31-JAN-2003; 2003WO-US003194.

PR 31-JAN-2002; 2002US-00060087.

PR 15-MAR-2002; 2002US-0364045P.

PR 15-MAR-2002; 2002US-0364055P.

PR 30-DEC-2002; 2002US-0436643P.

PA (GENE-) GENE LOGIC INC.

PI Mendrick D, Porter M, Johnson K, Higgs B, Castle A, Elashoff M;

PI WPI; 2003-689530/65.

PT Predicting a toxic effect of a compound, useful in identifying toxicity
PT markers in liver tissues or cells for drug screening and toxicity assays,
PT comprises preparing gene expression profile of tissue or cells exposed to
PT the compound.

PS Claim 1; SEQ ID NO 3462; 1156pp; English.

CC The present invention relates to a method for predicting a toxic effect
CC of a compound. The method comprises preparing a gene expression profile
CC of a tissue or cell sample exposed to the compound, and comparing the
CC gene expression profile to a database comprising SEQ ID 1-4925, where
CC differential expression of the gene indicates at least one toxic effect.

CC The method is useful for predicting at least one toxic effect of a
CC compound, predicting hepatotoxicity or the progression of a toxic effect
CC of a compound, identifying an agent that modulates the onset or
CC progression of a toxic response, predicting the cellular pathways that a
CC compound modulates in a cell, and identifying an agent that modulates at
CC least one activity of a protein. The method and compositions of the
CC present invention using a database of genes having liver toxin-induced
CC differential expression, are useful in identifying toxicity markers in
CC liver tissues or cells for drug screening and toxicity assays. Note: The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.

SQ Sequence 2671 BP; 638 A; 739 C; 776 G; 518 T; 0 U; 0 Other;

Query Match 84.2%; Score 1991.2; DB 10; Length 2671;

Best Local Similarity 90.4%; Pred. No. 0; Mismatches 223; Indels 3; Gaps 1;

Matches 2138; Conservative 0; Mismatches 223; Indels 3; Gaps 1;

QY 1 ATGCTCTGTGGATACAAAGCTCAGAGCTCAAGGAGAAGCCCTTCATCAGATGCAAGCG 60
DB 111 ATGCAATGTGGATACAGGCTCAGAGCTCCAGGCGATGCCCTTCATCAGATGCAAGCG 170
QY 61 TTATATGGCCAGCATTTTCCCATTTGAGGTGGCGCATTTATTTATCCAGTGATTGAAGC 120
DB 171 TTGTACGGCCAGCATTTTCCCATCGAGTGGACATTTATTTATCCAGTGATGCAAGT 230
QY 121 CMAGCATGGGACTCAGTAGATCTTGATTAATCCAGGAGACATTTAAGGCCACCCAGCTC 180
DB 231 CAAGCTTGGGACTCAATAGATCTTTGATTAATCCAGGAGAACATTTAAGGCCACCCAGCTC 290
QY 181 CTGGAGGCGCTGTGTGAGGAGCTCAGAGAAGGAGCAGACAGGTGGGGAAGATGGG 240
DB 291 CTGGAGGCGCTGTGTGAGGAGCTCAGAGAAGGAGCAGACAGGTGGGGAAGATGGG 350
QY 241 TTTTACTGAAGATCAAGCTGGGCACTATGCCACACAGCTCCAGAACACATGTAGCCG 300
DB 351 TTTTGTGTAAGATCAAGCTGGGCACTATGCCACAGCAGCTCCAGAACACATGTAGCCG 410
QY 301 TGCCCATGGAGCTGGTCCGCTGCATCGGCATATATTGTACATGACAGAGTTGGTC 360
DB 411 TGCCCATGGAGCTGGTTCGCTGTATCCGGCACATTTATACAAATGAACAGAGGCTGTC 470
QY 361 CGAGAAGCCAAACAATGGTAGCTCTCCAGCTGGAAGCCTTGCTGATGCTCCAGAAA 420
DB 471 CGAGAAGCCAAACAAGCAAGCTCTCCGCTGGAAGTCTTGTGACGCCATGTCCTCCAG 530
QY 421 CACCTCCAGATCAACCAAGCGTTTGGAGAGCTGCGACTGGTCAACGAGGACACAGAGAA 480
DB 531 CACCTTCAGATCAACCAAGCGTTTGGAGAGCTGCGTCTGATCAACAGGACACGAGAGC 590
QY 481 GAGTTAAAAGCTGCGAGCAGACTCAGAGTACTTTCATCATCCAGTACCAGAGAGCCTG 540
DB 591 GAGCTGAAGAGCTGCGAGCAGACCCAAAGAGTACTTTCATCATCCAGTACCAGAGAGC 650
QY 541 AGGATCCAAGCTCAGTTTGGCCCGCTGCGCCAGCTGAGCCCGCCAGGAGCGCTCTGAGCG 600
DB 651 CGGATCCAAGCTCAGTTTGGCCCGCTGCGCCAGCTGAGCCCGCCAGGAGCGCATGAGCAG 710
QY 601 GAGACGGCCCTCCAGCAGAGAAGCAGGTGTCTCTGAGGCGCTGGTTCAGCGCTGAGGCA 660
DB 711 GAGACAGCCCTCCAGCAGAGAAGCAGGTGTCTCTGAGGAGCTGGCTGGCAGAGAGGCA 770
QY 661 ACTGTGAGCAGTACCCGCTGGAGCTGCCGAGAGCAGCAGAGAGCCTTCAGCTGCTG 720
DB 771 ACCTGAGCAGTACCCGCTGGAGCTGGCTGAAAAGCAGCAGAGAGCCCTTCAGCTGCTG 830
QY 721 CGGAAGCAGCAGACCATCTCCCTGGATGACAGCTGATCCAGTGGGAAGCGCGCAGCAG 780
DB 831 AGGAAGCAGCAGACCATCTCTGAGCAGAGCTGATCCAGTGGGAAGCGCGCAGCAG 890
QY 781 CTGCGCGGGAACCGCGGCGCCCGCAGGCGAGCCTGGAGCTGCTACAGTCTCTGCTGAG 840

Db 891 CTGCCGGGAATGGGGTCTCTCTGAGGGCAGCTGGATGCTGCGAGTCTCTGGTGTGAG 950
Qy 841 AAGTTGGCGAGATCATCTGGCAGAACCGGCAGCAGATCCGCGAGGGCTGAGCACTCTGC 900
Db 951 AAGTGGCCGAGATCATCTGGCAGAACCGGCAGCAGATCCGCGAGGGCTGAGCACTCTGC 1010
Qy 901 CAGCAGCTGCCATCCCGGCCAGTGGAGGAGATGCTGCCGAGGFTCAAGCCACCATC 960
Db 1011 CAGCAGCTGCCATCCCGGCCAGTGGAGGAGATGCTGCCGAGGFTCAAGCCACCATC 1070
Qy 961 ACGACATATCTCAGCCCTGGTGACCAAGCAGACGCTTCATCATTTAGAAAGCAGCCTCTCAG 1020
Db 1071 ACAGACATCATCTCAGCCCTGGTGACCAAGCAGACGCTTCATCATCGAAGACGCTCTCAG 1130
Qy 1021 GTCTGAAGACCCAGACCAAGTTTGGAGCCACTGTGCGCTCTGTGGTGGGGGGAAGCTG 1080
Db 1131 GTCTGAAGACCCAGACCAAGTTTGGCGCCACCTGCGCCCTGTGTGGTGGGGGAAGCTG 1190
Qy 1081 AAGTGCACATGAACCCCGCCAGGTGAAGGCCACCATCATCATGAGCAGCAGGCCAAG 1140
Db 1191 AAGTGCACATGAACCCCTCCGAGGTGAAGGCCAACCATCATCATGAGCAGCAGGCCAAG 1250
Qy 1141 TCTCTGTCTAAGAACGAGAACACCCGCAATGATTTACAGTGGCGAGATCTTTGAACAACTGC 1200
Db 1251 TCCCTGTCTAAGAACGAGAACACCCGCAATGATTTATAGCGCGAGATCTCTGAACAACTGC 1310
Qy 1201 TGCTGTATGAGATACCAACCAAGCCACAGGCCACCTTTAGTGCCTCATTTAGGAATATATCC 1260
Db 1311 TGCTGTATGAGATACCAACCAAGGCCACAGGCCACCTTCAGCGCCCACTTCAGAAACATGTC 1370
Qy 1261 CTGAAACGAATTAGAGGTGAGCCGCTCGTGGGCAGAGTCGGTGACAGAGAAATTT 1320
Db 1371 CTGAAACGAATCAAGAGGTCTGACCCGCGGTGTCAGAGTCGGTGACGGAAGAGATTC 1430
Qy 1321 ACAATCTGTTGAATCCCACTTCAGTGTGGTGGAAATGAGTGGTTTTTCAAGTCAAG 1380
Db 1431 ACAATCTGTTGACTCACAGTTCAGTGTGGTGGAAATGAGTGGTTTTTCAAGTCAAG 1490
Qy 1381 ACCGTGCTCCCTGCGAGTGGTGTGATCGTTTCATGGCAGCCAGGACCAATGGCAGCGCC 1440
Db 1491 ACCTTGTGCTCCCGGTGGTGTGATCGTTTCACGGCAGCCAGGACCAATGGCAGCGCT 1550
Qy 1441 ACTGTTCTCTGGGACAAATGCTTTGACAGAGCTCGCAGGGTGCCATTTGCGTGCCTGAC 1500
Db 1551 ACCGTCTCTGGGACAAACGCTTTGACAGAGCTCGCAGGGTGCCATTTGCGTGCCTGAC 1610
Qy 1501 AAAGTGTCTGGCCACAGCTGTGTGAGCGCTCAACATGAAATTTCAAGGCCGAAAGTGCAG 1560
Db 1611 AAGTGTCTGTGGCCGACGCTGTGTGAGCGCTCAACATGAAATTTCAAGGCTGAGGTGCAG 1670
Qy 1561 AGCAACCGGGCCTTGACCAAGGAGAACTCGTGTTCCTGGCGCAGAAACTGTTCAACAGC 1620
Db 1671 AGCAACCGGGCCTTGACCAAGGAGAACTCGTGTTCCTGGCGCAGAAACTGTTCAACAGC 1730
Qy 1621 AGCAGAGCCACCTGGAGGACTACAGTGGCTGTGTGCTGCTGCTGCTGCCAGTTCAACAG 1680
Db 1731 AGCAGAACCACTCGAGGACTACAACAGCATGTCCGTTCCCTGCTCCAGTTCAACCGG 1790
Qy 1681 GAGAAATTTACAGGACCGAAATTAACATTTCTGGCAATGGTTTGAACGGTGTGATGGAAGTG 1740
Db 1791 GAGAAATCTGCCAGACCGAAATTAACATTTCTGGCAGTGGTTTGAACGGTGTGATGGAAGTG 1850
Qy 1741 TTAAGAAACATCTCAAGCCTCATTTGGAATGATGGGCCATTTTGGGGTTTGTAAACAAG 1800
Db 1851 TTAAGAAACATCTCAAGCCTCATTTGGAATGATGGGCCATTTTGGGGTTTGTGTGAACAAG 1910
Qy 1801 CAACAGCCCATGACCTACTGATTAACAAGCAGATGGGACCTTCTCTCGAGATTCAGT 1860
Db 1911 CAGCAGCCCAACGACCTGCTCATCAACAGCCAGATGGGACCTTCTCTCGCTTCAGC 1970
Qy 1861 GACTCAGAAATTTGGCGGCATCACCATTGCTTTGGAAGTTTGTATCTCAGGAAAGAAATTTT 1920
Db 1971 GACTCGGAAATCGGGGGCATCACCATTGCTTTGGAAGTTTGTATCTCCAGGAGAGAAATGTTT 2030

Qy 1921 TGGAAATCTGATGCTTTTACCACAGAGACTTCTCCATCAGGTCCCTAGCCGACCGCTTG 1980
Db 2031 TGGAAATCTGATGCTTTTACCACAGAGACTTCTCTATCCGGTCCCTCGCTGACCGCTG 2090
Qy 1981 GGAGACTTGAATTAACCTTATCTACGTGTTTCTGTGATCGGCCAAAAGATGAAGTATATCC 2040
Db 2091 GGGGACTGAAATTAACCTTATCTATATACGTGTTTCTGTGATCGGCCAAAAGATGAAGTATATCT 2150
Qy 2041 AAATACTACACACAGTTCCTTCGAGTCTGTCTAAAGCTGTGTTAAAGCTGTGATGATACGTG 2100
Db 2151 AAGTACTACACACAGTTCCTTCGAGTCTGTGAGCCCGCCAGCGAAAGCAGTGAACGATACGTG 2210
Qy 2101 AAGCCACAGATCAAGCAAGTGGTCCCTGAGTTTGTGAACGATCTGCAGATGCCGGGC 2160
Db 2211 AAGCCCGAGATCAAGCAAGTGGTCCCGAGTTTGTCAATGCTTCTGCAGATGACGGAGC 2270
Qy 2161 GGCAGCGCCACGTACATGGAACAGGCCCTCCCGCAGCTGTGTGTCTCCAGGCTCACTAT 2220
Db 2271 G---GGCCACCTACATGGACAGGCTCTTCCCGAGTGTGTGCCCTCAGGCTCACTAT 2327
Qy 2221 AACATGTACCCACAGAACCCCTGACTCAGTCTCTTGAACCGATGGGACTTTCGATCTGGAG 2280
Db 2328 AACATGTACCCACAGAAATCCGACTCTGTCTCGATACCGATGGGATTTTCGATCTGGAA 2387
Qy 2281 GACACAAATGGACGTAGCGCGGTGTGGAGGAGCTCTTGGCGCGCCAAATGGACAGTCAG 2340
Db 2388 GACACAGTGGACGTGGCAGCGGTGTGGAAGAGCTCTTAGGCGCGCCCATGGACAGTCAG 2447
Qy 2341 TGGATCCCGCACGACCAATCGTGA 2364
Db 2448 TGGATCCCTCACGCGCAGTCATGA 2471

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